

MEMÒRIA DE RECERCA I DOCÈNCIA 2002

Departament de Psiquiatria i
Psicobiologia Clínica



UNIVERSITAT DE BARCELONA



ÍNDEX

	Pàgina
1. Presentació	1
2. Membres del departament	4
2.1. Subunitat de Psiquiatria	4
2.2. Subunitat de Psicobiologia Clínica	4
2.3. Alumnes de doctorat	6
3. Projectes d'investigació subvencionats	7
4. Projectes innovació docent subvencionats	15
5. Doctorat	18
6. Llistat de les publicacions amb Factor d'Impacte	26
6.1. Subunitat de Psiquiatria	26
6.2. Subunitat de Psicobiologia Clínica	28
6.3. Publicacions conjuntes	31
6.4. Freqüència i Factor d'Impacte de les revistes	33
7. Resum dels articles amb Factor d'Impacte	34
7.1. Subunitat de Psiquiatria	34
7.2. Subunitat de Psicobiologia Clínica	45
7.3. Publicacions conjuntes	59
8. Gràfiques de les publicacions	62
9. Docència	63
9.1. Docència de pregrau	63
9.2. Doctorat de Neurociències	64

1. PRESENTACIÓ

En la memòria 2002 a més de les activitats de recerca que anàvem recollint fins ara, hem inclòs també l'activitat docent que en anys anteriors donàvem per recopilada en les corresponents guies de l'estudiant dels ensenyaments en els que el nostre departament imparteix docència: Medicina, Psicologia, Farmàcia, Odontologia, Podologia i Geografia i Història. Donada la dificultat d'accedir de forma ràpida a cada una d'aquestes guies i a les indicacions del nou Estatut de la Universitat de Barcelona que entrarà en vigor properament, hem reunit aquesta informació.

En l'àmbit de la recerca, es recull la principal activitat investigadora portada a terme a l'any 2002 pels professors, becaris i doctorands adscrits al nostre departament. Hem continuat amb l'esquema emprat en l'avaluació dels ensenyaments del període 1995-1999 i de les memòries 2000 i 2001, però per evitar les repeticions d'articles que es donaven en fer les divisions per subunitats, hem afegit un tercer apartat de les publicacions comunes en el que hi participen professors de les dues subunitats.

Hem de constatar que es nota un increment en l'activitat investigadora pel que fa a la implicació del professorat en projectes de recerca subvencionats per institucions públiques. Pràcticament tot el professorat numerari de Psicobiologia forma part d'algun projecte subvencionat, i l'investigador principal del projecte està adscrit a Psicobiologia. Pel que fa als professors associats encara mostren poca vinculació a la activitat de recerca pròpia del departament. Alguns col·laboren en projectes d'altres universitats o departament, o no estan en actiu. Pel que fa a la subunitat de Psiquiatria, hi continua havent més projectes privats que públics, però també hi ha un increment de treballs subvencionats pel Ministerio de Sanidad y Consumo (FISS). Aquests projectes no estan però gestionats per la UB.

En l'àmbit de la productivitat científica, com en les anteriors edicions no hem inclòs els llibres i capítols de llibres, ni les publicacions en revistes sense factor d'impacte en el SCI o el SSCI de l'ISI (Philadelphia, Pennsylvania, USA), ni les comunicacions a congressos. Aquesta informació és molt difícil d'obtenir i no és fàcilment objectivable.

A diferència del criteri d'altre memòries de recerca, com per exemple la de l'Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), hem inclòs com a publicacions del departament tant les afilades com a tal al departament com les que tenen altra tipus d'afiliació. En les afiliacions, que estan recollides en els *abstracts* procedents de les bases de dades Medline (US National Library of Medicine, Bethesda, MD) o Psycinfo (American

Psychological Association, Washington, DC), podem observar que hi ha una àmplia gamma de denominacions de les mateixes institucions: els noms del departament o de l'Institut de Psiquiatria i Psicologia de l'Hospital Clínic apareixen en tres idiomes diferents, les sigles IDIBAPS estan amb o sense punts, etc. La Universitat de Barcelona no sempre apareix, les facultats només alguna vegada, les divisions mai i l'ordre és variable. Seria interessant normalitzar el sistema d'afiliacions. Es encara més curiós veure que alguns articles fets al Departament o al Servei de Psiquiatria adrecen la correspondència a domicilis particulars o a *e-mails* privats, en lloc de fer-ho a l'investigador responsable de la recerca com caldria esperar.

La qüestió però de les afiliacions i de les adreces dels responsables del articles és molt complex si tenim en compte que en l'actualitat és fan de forma simultània 3 memòries de recerca que impliquen les mateixes persones i les mateixes publicacions: la de l'Institut de Psiquiatria i Psicologia de l'Hospital Clínic, la de l>IDIBAPS i la del propi departament.

De l'anàlisi de les publicacions, destacaríem que hi ha una petita davallada, respecte a l'any anterior, tant en el seu nombre absolut com en l'índex d'impacte i la seva mitjana. Encara que es publica en revistes amb un alt factor d'impacte, continua havent-hi moltes publicacions en revistes de baix impacte. La mitjana ha baixat molt, en especial a Psicobiologia, degut a aquest tipus de publicacions.

Per altra banda creiem que hi ha una excessiva dispersió en el nombre de revistes on es publica. Un total de 44 articles han estat publicats en 29 revistes diferents i només a 6 revistes s'ha publicat més d'un sol article. Aquest fet no s'explica únicament per les diferents subespecialitats dels investigadors ja que un mateix investigador pot publicar en un gran nombre de revistes. Creiem que en el futur s'hauria d'anar delimitant més el nombre de revistes d'acord amb les subespecialitats dels investigadors i les línies editorials de les revistes.

Pel que fa al doctorat, el doctorat Neurociències ha rebut la menció de doctorat de qualitat de la Divisió de Ciències de la Salut, conjuntament amb dos doctorats més de la divisió. Això ha estat possible gràcies a la qualitat del professorat (valorada amb les publicacions en revistes prestigioses), la relació entre alumnes inscrits i que han superat el DEA i la relació entre matrícula i tesis llegendes per any, així com la relació d'articles publicats derivats de les tesis doctorals. Hem de fer constar però, que el programa no està encara correctament estructurat i que caldria revisar a més de l'estructura, els continguts dels programes, objectius i plans docents. També caldria fer un esforç d'integració a l'espai de recerca i docència de la Unió Europea.

En la memòria d'enguany, s'agraeix la col·laboració de Pilar Bouzas, M Carmen García i Pere Vendrell en la recollida de dades i la seva elaboració.

La directora del departament

Carme Junqué

Barcelona, setembre de 2003

2. MEMBRES DEL DEPARTAMENT

2.1. Subunitat de Psiquiatria

PROFESSORS CATEDRÀTICS D'UNIVERSITAT

Julio VALLEJO RUILOBA

PROFESSORS TITULARS D'UNIVERSITAT

Josep COROMINAS BUSQUETA

Tomas De FLORES FORMENTI

Cristòbal GASTÓ FARRÉ

Wilma PENZO GIACCA

Josep TORO TRALLERO

Manuel VALDÉS MIYAR

PROFESSORS ASSOCIATS DOCTORS

Miquel BERNARDO ARROYO

Gloria CANALDA SAHLI

Anna Maria MARTINEZ GONZÁLEZ

Josep Manuel MENCHON MAGRIÑA

Julia OLIVARES GADEA

Juan de PABLO RABASSO

José Emilio ROJO RODES

Manuel SALAMERO BARÓ

Rosa Maria SENDER ROMEO

PROFESSORS ASSOCIATS

Mercedes DAURELLA NADAL

Josep Maria FARRÉ MARTÍ

Aurora OTERO CAMPRUBI

Joaquín PUJOL DOMENECH

Vicente Jose TURÓN GIL

BECARIS DE FORMACIÓ EN INVESTIGACIÓ

Jesús UNTURBE SANCHEZ (G)

PERSONAL D'AMINISTRACIÓ

Pilar BOUZAS RODRÍGUEZ

2.2. Subunitat de Psicobiologia Clínica

PROFESSORS CATEDRÀTICS D'UNIVERSITAT

Carme JUNQUÉ PLAJA

Miquel SÁNCHEZ-TURET

PROFESSORS TITULARS D'UNIVERSITAT

Ana ADAN PUIG

Elena ALMIRALL LLUCH

I. Concepción CLEMENTE LAPENA

Montserrat COLELL MIMÓ

Carles ESCERA MICÓ

Carlos GRAU FONOLLOSA

María Angeles JURADO LUQUE
Dolors SEGARRA CASTELLS
Josep M. SERRA GRABULOSA
Joaquim Josep VEÀ BARÓ
Pere VENDRELL GÓMEZ

INVESTIGADORS DEL PROGRAMA “RAMÓN Y CAJAL”

David BARTRÉS FAZ

PROFESSORS ASSOCIATS DOCTORS

Teresa BOGET LLUCIÀ
Armando ESTEVEZ GONZÁLEZ
Fernando FERNÁNDEZ ARANDA
Teodor MARCOS BARS
Montserrat PÉREZ PÀMIÉS
María MATARÓ SERRAT
Gemma PRAT VIGUÉ
Roser PUEYO BENÍTEZ

PROFESSORS ASSOCIATS

Eva LLIGOÑA TRULLA
Josep M. SUELVES JOANXICH

BECARIS DE FORMACIÓ EN INVESTIGACIÓ

M. del Mar ARIZA GONZÁLEZ (MC)
Xavier CALDU FERRUS (G)
Vanessa CARRAL BIELSA (G)
M José CORRAL LOPEZ (MC)
Miriam CORTIÑAS MONTERO (G)
Mónica GIMENEZ NAVARRO (M)
M del Mar MATARIN JIMENEZ (R)
Beatriz MONTERO DELGADO (G)
Blanca RAMIREZ RUIZ (M)
Pilar SALGADO PINEDA (R)
Sonia SANCHEZ LOPEZ (R)

G= Beca d'Investigació de la Generalitat (FI)
M= Beca d'Investigació del Ministeri d'Educació Cultura i Esport (FPU)
MC (Beca d'investigació del Ministeri de Ciència i Tecnologia (FPI)
R= Beca de Recerca i Docència de la UB (BRD)

BECARIS DE TERCER CICLE SUBVENCIONATS PER LA DIVISIÓ

Marta OLIVARES GRAU
Marina LLORENTE CAÑO
Bibiana MARTÍN PRAT
Ana NARBERHAUS
Sandra POSADA SALAZAR
Antoni RASPALL CHAURE
Cristina SOLÉ PARDUELLES

BECARIS DE PROJECTES DE RECERCA DE LA DIVISIÓ

Susana BELLO OTERO
Lluís FUENTEMILLA GARRIGA
Josep MARCO PALLARÉS

PERSONAL D'ADMINISTRACIÓ

M. Carmen GARCIA DIAZ

2.3. Alumnes de Doctorat*

Andrés Perpiñà, Susana
Beltrán Delgado, Francisco
Caldú Ferrús, Xavier
Carral Bielsa, Vanessa
Castellví Sampol, Magda
Corbera López, Silvia
Corral Lopez, M Jose
Cortiñas Montero, Miriam
Dolz Abadia, Montserrat
Escartin Martin, Gemma
Forcadell Ferreres, Eva
Franco Vasquez Jose G
Fuentemilla Garriga, Lluís
Giménez Navarro, Mónica
González Tugás, Matías
Grau Olivares, Marta
Hernández Ribas, M. Rosa
Hugué Lozano, Elisenda
Imaz Gurruchaga, M. Luisa
León Pizarro, Concepción
Marco Parllares, Josep
Merino Lucea, M Elena
Morer Liñan, Astrid
Narberhaus, Ana
Plaza Estradé, Anna
Pons Villanueva, Alexandre
Portella Moll, M Jesús
Puig Navarro, Olga
Ramírez Ruíz, Blanca
Raspall Chaure, Antoni
Reinares Gagnetten, María
Roure Poch, Pere
Ruiz Sanchez Eva
Santiago Rolanía, Olga
Serrano Blanco, Antoni
Solé Padullés, Cristina
Unturbe Sanchez, Jesús
Vallejo Blanxart, Gemma

* Només s'inclouen els alumnes del doctorat de Neurociències (2000-2004)

3. PROJECTES D'INVESTIGACIÓ SUBVENCIONATS

Títol del projecte	<i>Consecuencias neuropsicológicas a largo plazo de las asfixias perinatales. Relación entre las lesiones cerebrales evidenciadas por imágenes de resonancia magnética y los déficits cognitivos</i>
Referència	PM98-0192
Data d'inici	01/08/1999
Data finalització	01/08/2002
Entitat finançadora	MEC
Import	1.581.000 Pts.
Investigador Principal	C. Junqué
Membres del departament que hi participen	W. Penzo, P. Vendrell, J. Toro, M.D. Segarra
Títol del projecte	<i>Plataforma de genotipación en salud mental y psiquiatría</i>
Referència	Redes de Grupo (G03/184)
Data d'inici	01/01/2002
Data finalització	31/12/2005
Entitat finançadora	Ministerio de Sanidad y Consumo (FIS)
Import	1.370.000 €
Investigador Principal	X. Estivill
Membres del departament que hi participen	F. Fernández Aranda; J.M. Menchon
Títol del projecte	<i>Marcadores psicobiológicos de vulnerabilidad al alcoholismo</i>
Referència	PM99-0174-C02-01
Data d'inici	22/09/2000
Data finalització	22/09/2003
Entitat finançadora	CICYT
Import	2.690.000 Pts.
Investigador Principal	M. Sánchez-Turet
Membres del departament que hi participen	A. Adan, I. Clemente
Títol del projecte	<i>Caracterización de alteraciones atencionales mediante potenciales evocados en niños con trastorno por déficit de atención e hiperactividad (TDAH)</i>
Referència	PM99-0167

Data d'inici	22/09/2000
Data finalització	22/09/2003
Entitat finançadora	DGES, Area de Salud
Import	4.285.000 Pts.
Investigador Principal	C. Escera
Membres del departament que hi participen	C. Grau
Títol del projecte	<i>Memoria sensorial auditiva para patrones abstractos: estudio con potenciales evocados</i>
Referència	BSO2000-0679
Data d'inici	23/12/2000
Data finalització	23/12/2003
Entitat finançadora	CICYT
Import	5.000.000 pts.
Investigador Principal	C. Grau
Membres del departament que hi participen	C. Escera
Títol del projecte	<i>Investigación biomédica en ciencias neurológicas</i>
Referència	Redes de Centro (C03/06)
Data d'inici	01/01/2003
Data finalització	31/12/2005
Entitat finançadora	Ministerio de Sanidad y Consumo (FIS)
Import	4.000.000 €
Investigador Principal	Isidre Ferrer
Membres del departament que hi participen	F. Fernández Aranda, J.M. Menchón
Títol del projecte	<i>Estudi de l'activitat cerebral mitjançant ressonància magnètica funcional</i>
Referència	2000XT 00094
Data d'inici	2000
Data finalització	2002
Entitat finançadora	Direcció General de Recerca (Generalitat de Catalunya)
Import	800.000 Pts.
Investigador Principal	C. Junqué
Membres del departament que hi participen	Tot el grup de Neuropsicologia

Títol del projecte	<i>Grup de Neuropsicologia</i>
Referència	2001SGR 00139
Data d'inici	2001
Data finalització	2004
Entitat finançadora	Direcció General de Recerca
Import	10.000.000 Pts.
Investigador Principal	C. Junqué
Membres del departament que hi participen	Tot el grup de Neuropsicologia
Títol del projecte	<i>Factores predictores de mejoría en bulimia nerviosa</i>
Referència	00/285
Data d'inici	01/01/2000
Data finalització	31/12/2002
Entitat finançadora	FIS. Ministerio de Sanidad y Consumo
Import	650.000 pts.
Investigador Principal	F.Fernández
Membres del departament que hi participen	V. Turón
Títol del projecte	<i>The role of social,genetic and environmental factors in healthy eating:a multicentre analysis of eating disorders and obesity</i>
Referència	QLK1-1999-916
Data d'inici	01/03/2000
Data finalització	01/03/2003
Entitat finançadora	Unión Europea (UE)
Import	48.411.338 Pts. (Grup espanyol)
Investigador Principal	F.Fernández (Grup espanyol)
Membres del departament que hi participen	Cap
Títol del projecte	<i>Trastorno obsesivo-compulsivo y trastornos de la alimentación: estudio comparativo de factores psicopatológicos, psicológicos y genéticos.</i>
Referència	01/1558
Data d'inici	01/01/2001
Data de finalització	31/12/2003
Entitat finançadora	FIS. Ministerio de Sanidad y Consumo
Import	10.450.000 pts.
Investigador Principal	J. Vallejo Ruiloba
Membres del departament	F. Fernández Aranda, J.M. Menchon Magriñà, V.

que hi participen	Turón Gil
Títol del projecte	<i>Marcadores neuropsicológicos precoces de la enfermedad de Alzheimer</i>
Referència	024/97
Data d'inici	02/12/1997
Data finalització	02/12/2002
Entitat finançadora	Fundació "La Caixa-Marató TV3"
Import	10.857.150 Pts.
Investigador Principal	C. García-Sánchez
Membres del departament que hi participen	A. Estévez González
Títol del projecte	<i>Temperamento y rasgos de personalidad como factores de riesgo en trastornos de la alimentación</i>
Referència	Beca Fundación Eroski
Data d'inici	01/01/2002
Data finalització	31/12/2002
Entitat finançadora	Fundación Eroski
Import	6.000 €
Investigador Principal	F. Fernández Aranda
Membres del departament que hi participen	F. Fernández Aranda, C. Casanovas
Títol del projecte	<i>Estudi multidisciplinari de la utilitat de la determinació de l'àcid homovanílic plasmàtic com a predictor de recaiguda en pacients esquizofrènics</i>
Referència	011110
Data d'inici	01/01/2002
Data finalització	31/12/2004
Entitat finançadora	Marató TV3
Import	11.365.350 Pts.
Investigador Principal	Miquel Bernardo Arroyo
Membres del departament que hi participen	-
Títol del projecte	<i>Eficàcia de la rehabilitació neuropsicològica en l'esquizofrènia crònica: repercussions sobre les variables clíniques, l'activitat cerebral i el funcionament psicosocial.</i>
Referència	N-2001Tv 1510-0
Data d'inici	05/02/2002
Data finalització	05/02/2005
Entitat finançadora	Marató TV3

Import	9.060.000 Pts.
Investigador Principal	Teresa Boget Lluçà
Membres del departament que hi participen	M. Salamero Baró
Títol del projecte	<i>Factors neuropsicològics específics en la depressió senil per a l'estudi pronòstic de la malaltia:funcions executives i Spect.</i>
Referència	01/2210
Data d'inici	01/01/2002
Data finalització	31/12/2004
Entitat finançadora	Marató TV3
Import	6.548.700 Pts.
Investigador Principal	Teodor Marcos Bars
Membres del departament que hi participen	M. Salamero, C. Gastó, R. Pueyo
Títol del projecte	<i>Etiopatogènia del trastorn obsessiu-compulsiu: estudi genètic, neurofisiològic, neuropsicològic i de neuroimatge estructural.</i>
Referència	No determinada
Data d'inici	No determinada
Data finalització	No determinada
Entitat finançadora	Marató TV3
Import	17.671.651 Pts.
Investigador Principal	Josep Manuel Menchón Magriñà
Membres del departament que hi participen	-
Títol del projecte	<i>Procesamiento de la disparidad binocular</i>
Referència	BSO2001-3639
Data d'inici	09/11/2001
Data finalització	31/12/2004
Entitat finançadora	Ministerio de Ciencia y Tecnología-Plan Nacional I+D
Import	5.412.000 Pts.
Investigador Principal	J.A. Aznar
Membres del departament que hi participen	H. Almirall

Títol del projecte	<i>Identificación de parámetros ecológicos relevantes para la viabilidad de poblaciones de Alouatta palliata en habitat fragmentado: Aplicaciones a la conservación de los primates mexicanos.</i>
Referència	PB98-1270
Data d'inici	30/12/1999
Data finalització	30/12/2002
Entitat finançadora	Ministerio de Educación y Cultura
Import	2.960.000 Pts.
Investigador Principal	Joaquin J. Veà Baró
Membres del departament que hi participen	
Títol del projecte	<i>Entrenament familiar per a la prevenció de les drogodependències. Implantació i resultats</i>
Referència	GREC 004746
Data d'inici	28/01/2003
Data finalització	28/01/2006
Entitat finançadora	Delegación del Gobierno para el Plan Nacional sobre Drogas. Ministerio del Interior
Import	96.200 €
Investigador Principal	J.M. Suelves
Membres del departament que hi participen	M. Sánchez-Turet
Títol del projecte	<i>Plasticidad conductual y cambio ecológico en Alouatta palliata mexicana. Diseño de estrategias de conservación para un hábitat fragmentado</i>
Referència	BSO2002-03340
Data d'inici	01/11/2002
Data finalització	31/12/2005
Entitat finançadora	Ministerio de Ciencia y Tecnología
Import	
Investigador Principal	J. J. Veà Baró
Membres del departament que hi participen	M. Colell
Títol del projecte	<i>Psicofisiología cognitiva y neurodinámica clínica.</i>
Referència	00-XT 00021
Data d'inici	23/02/2001
Data finalització	31/12/2002
Entitat finançadora	Direcció General de Recerca (Generalitat de Catalunya)
Import	800.000 Pts.

Investigador Principal	Carles Grau Fonollosa
Membres del departament que hi participen	C. Escera, J. Toro
Títol del projecte	<i>Análisis vocal en etología de los primates</i>
Referència	2001PIR A00284
Data d'inici	01/01/2002
Data finalització	31/12/2002
Entitat finançadora	Generalitat de Catalunya
Import	
Investigador Principal	J. J. Veà
Membres del departament que hi participen	-
Títol del projecte	<i>Origen, evolució i comportament dels primers homínids</i>
Referència	2001XT 00006
Data d'inici	01/12/2001
Data finalització	31/12/2002
Entitat finançadora	Generalitat de Catalunya
Import	
Investigador Principal	J.J. Veà, M. Colell
Membres del departament que hi participen	
Títol del projecte	<i>Xarxa temàtica en Drogodependències.</i>
Referència	00XT 00022
Data d'inici	23/02/2001
Data finalització	31/10/2002
Entitat finançadora	Direcció General de Recerca (Generalitat de Catalunya)
Import	800.000 Pts.
Investigador Principal	Miquel Sánchez-Turet
Membres del departament que hi participen	A. Adan, C. Clemente, J.M. Suelves
Títol del projecte	<i>Evolució dels homínids i altres primats</i>
Referència	2000SGR
Data d'inici	01/01/2000
Data finalització	31/12/2002
Entitat finançadora	Generalitat de Catalunya
Import	
Investigador Principal	J.J. Veà

**Membres del departament
que hi participen**

-

Títol del projecte*Bases neuroanatómicas y neurofuncionales de las alteraciones de la memoria en sujetos que nacieron prematuros con antecedentes de anoxia perinatal y/o hemorragia intraventricular***Referència**

SAF02-00836

Data d'inici

1/12/2002

Data finalització

1/12/2005

Entitat finançadora

Ministeri de Ciència i Tecnologia

Import

46. 000,00 €

Investigador Principal

Carme Junqué Plaja

**Membres del departament
que hi participen**Dolors Segarra, Josep M Serra, Pere Vendrell

4. PROJECTES D'INNOVACIÓ DOCENT SUBVENCIONATS

Títol del projecte	<i>Psicobiologia del son</i>
Referència	10/IV/MM-01/33 SEGA
Data d'inici	04/10/2001
Data finalització	04/10/2002
Entitat finançadora	Gabinet d'Avaluació i Innovació Universitària. Universitat de Barcelona
Import	275.000 Pts.
Investigador Principal	M. Dolors Segarra Castells
Membres del departament que hi participen	
Títol del projecte	<i>Formació d'un grup d'experts en l'avaluació dels coneixements en medicina mitjançant proves d'elecció múltiple (PEM)</i>
Referència	10/IV/FP-Av/02/PENZ
Data d'inici	11/06/2001
Data finalització	31/12/2002
Entitat finançadora	Gabinet d'Avaluació i Innovació Universitària. Universitat de Barcelona
Import	350.000 Pts.
Investigador Principal	Wilma Penzo Giacca
Membres del departament que hi participen	
Títol del projecte	<i>Requisits i factors de risc en l'alumnat de nou ingrés en Medicina. Caracterització segons la procedència.</i>
Referència	10/IV/AV-Er/09/PENZ
Data d'inici	11/06/2001
Data finalització	31/12/2002
Entitat finançadora	Gabinet d'Avaluació i Innovació Universitària. Universitat de Barcelona
Import	200.000 Pts.
Investigador Principal	Wilma Penzo Giacca
Membres del departament que hi participen	
Títol del projecte	<i>Ansietat de l'alumnat davant l'estrès de l'avaluació: un programa de la Facultat de Medicina.</i>
Referència	10/IV/AD-AI/04/SEND
Data d'inici	04/10/2001

Data finalització	04/10/2002
Entitat finançadora	Gabinet d'Avaluació i Innovació Universitària. Universitat de Barcelona
Import	200.000 Pts.
Investigador Principal	Rosa Sender Romeo
Membres del departament que hi participen	
Títol del projecte	<i>Proposta del programa d'atenció psicològica de la Facultat de Medicina: Avaluació de l'eficàcia del curs impartit en la Facultat de Medicina a joves llicenciats, en el període de preparació de l'examen per accedir al MIR, sobre estratègies de control de l'ansietat i organització de l'estudi</i>
Referència	11/IV/AV-Er/03/SEND
Data d'inici	2002
Data finalització	2004
Entitat finançadora	AJRE (Ajuts a la Recerca)
Import	300,00 €
Investigador Principal	Rosa Sender Romeo
Membres del departament que hi participen	
Títol del projecte	<i>Aprentatge assistit per ordinador per a les assignatures d'Etologia dels Primats i Introducció a l'Etoprimatologia</i>
Referència	11/IV/MM-De/75/COLE
Data d'inici	31/05/2002
Data finalització	
Entitat finançadora	Vice-Rectorat d'Ordenació Acadèmica i Gabinet d'Avaluació i Innovació Universitària de la UB
Import	suport d'un becari assignat a la Unitat de Suport a la Docència de la DIV
Investigador Principal	Montserrat Colell Mimó
Membres del departament que hi participen	Joaquim J. Veà Baró
Títol del projecte	<i>Disseny de l'assignatura Neuropsicologia Humana en crèdits ECTS.</i>
Referència	10/IV/AD/-Ects/08/JUNQ
Data d'inici	02/07/2001
Data finalització	31/06/2002
Entitat finançadora	Gabinet d'Avaluació i Innovació Universitària. Universitat de Barcelona
Import	135.000 Pts.

Investigador Principal	C. Junqué Plaja
Membres del departament que hi participen	M.A. Jurado, R. Pueyo, T. Marcos, J.M. Serra, M. Pérez-Pàmies
Títol del projecte	<i>Dissenys interactius on-line de primer nivell. Pràctiques de Neuropsicologia.</i>
Referència	10/IV/MM-01/32/JUNQ
Data d'inici	11/06/2001
Data finalització	31/06/2002
Entitat finançadora	Gabinet d'Avaluació i Innovació Universitària. Universitat de Barcelona
Import	275.000 Pts.
Investigador Principal	C. Junqué Plaja
Membres del departament que hi participen	J.M. Serra, M.A. Jurado, T. Marcos, R. Pueyo, M. Pérez-Pàmies

5. DOCTORAT

DOCTORAT DE NEUROCIÈNCIES

Bienni 2002-2004 - Alumnes matriculats del primer curs:

1. Caldú Ferrús, Xavier
2. Beltrán Delgado, Francisco
3. Cortiñas Montero, Miriam
4. Fuentemilla Garriga, Lluís
5. Giménez Navarro, Mónica
6. Grau Olivares, Marta
7. Hernández Ribas, M. Rosa
8. Hugué Lozano, Elisenda
9. León Pizarro, Concepción
10. Plaza Estradé, Anna
11. Puig Navarro, Olga
12. Raspall Chaure, Antoni
13. Serrano Blanco, Antoni

Bienni 2001-2003 - Alumnes matriculats del treball de recerca:

1. Andrés Perpiñà, Susana
2. Carral Bielsa, Vanessa
3. Corbera López, Silvia
4. Dolz Abadía, Montserrat
5. Escartin Martín, Gemma
6. González Tugás, Matías
7. Imaz Gurruchaga, M. Luisa
8. Morer Liñan, Astrid
9. Narberhaus, Ana
10. Pons Villanueva, Alexandre
11. Ramírez Ruíz, Blanca
12. Roure Poch, Pere
13. Santiago Rolanía, Olga
14. Solé Padullés, Cristina
15. Vallejo Blanxart, Gemma

Bienni 2000-2002 - Alumnes que han obtingut el DEA:

1. Castellví Sampol, Magda
2. Corral Lopez, M Jose
3. Forcadell Ferreres, Eva
4. Franco Vasquez Jose G
5. Marco Parllares, Josep
6. Merino Lucea, M Elena
7. Portella Moll, M Jesús
8. Reinares Gagnetén, María
9. Ruiz Sanchez Eva
10. Salgado Pineda, Pilar
11. Unturbe Sanchez, Jesús

TESIS DOCTORALS LLEGIDES A L'ANY 2002

TÍTOL: *Aprendizaje procedimental y recuerdo a largo plazo de habilidades cognitivas y sensoriomotoras en pacientes diagnosticados de esclerosis múltiple*

DOCTORAND/A: Maite Barrios

DIRECTOR/S: Joan Guardia Olmos

FACULTAT: Psicologia

RESUM:

La esclerosis múltiple (EM) es una enfermedad crónica desmielinizante del sistema nervioso central de etiología aún desconocida, que afecta a adultos jóvenes. En un alto porcentaje de los casos, la enfermedad se caracteriza por presentar brotes y remisiones de síntomas neurológicos. Estos síntomas se atribuyen al desarrollo agudo de placas en áreas que provocan una clínica evidente. Los síntomas más frecuentes que pueden acontecer a lo largo de la enfermedad son pérdida de funcionalidad o sensibilidad en las extremidades, alteraciones en el control vesical, disfunciones sexuales, sensación de fatiga, alteraciones en la visión, pérdida del equilibrio, vértigo, dolor, déficit cognitivos y cambios emocionales.

Diversos estudios afirman que la aparición de déficit cognitivos afecta a un 40-50% de los casos. El perfil de alteración cognitiva presente en la EM es similar al de un patrón subcortical. No obstante, uno de los aspectos menos estudiados en la enfermedad y que en diversos estudios han encontrado alterado en diferentes trastornos que cursan con demencia subcortical, es el aprendizaje procedimental. Es por ello que en el presente trabajo se centra en estudiar el rendimiento en pruebas que valoran aprendizaje de habilidades cognitivas y sensoriomotoras y su recuerdo a largo plazo en una muestra de pacientes con EM y un grupo control sano.

Se estudiaron 63 pacientes con EM y 28 controles sanos comparables en edad, años de escolaridad y género. 21 de los pacientes con EM seguía un curso remitente recurrente (RR), 27 seguían un curso primariamente progresivo (PP) y 15 presentaban una forma clínica secundariamente progresiva (SP). A todos los sujetos de la muestra se les administró una batería de tests que valoraban las siguientes capacidades: aprendizaje de habilidades cognitivas (Torre de Hanoi), aprendizaje de habilidades sensoriomotoras (Circuito en Estrella y Laberintos de Porteus), memoria declarativa (Recognition Memory Test, Figura Compleja de Rey, Pares Asociados Visuales de la WMS-R, Selective Reminding Test y subtest de Dígitos del WAIS), funciones frontales (Self-Ordered Pointing Test, Subtest de Semejanzas del WAIS, Wisconsin Card Sorting Test y fluidez verbal fonética y semántica) y velocidad motora (Nine Hole Peg Test). Se valoró el grado de depresión, ansiedad y fatiga mediante el cuestionario de depresión de Beck, los cuestionarios de ansiedad estado y rasgo (STAI-E, STAI-R) y la Escala de Gravedad de Fatiga de Krupp. En los 27 pacientes con EMPP se realizó un estudio de neuroimagen mediante las técnicas de resonancia magnética nuclear (RM) y de transferencia de magnetización (ITM) y en 18 pacientes con curso PP se realizó un estudio de la sustancia blanca de apariencia normal mediante la técnica de espectroscopia de protones por RM (ERM).

Los resultados que se derivan de este estudio muestran que los pacientes con EM presentan una capacidad de aprendizaje de habilidades sensoriomotoras y un recuerdo a largo plazo de la habilidad adquirida preservada. La capacidad de aprendizaje de habilidades cognitivas es similar a la de un grupo control sano, aunque los pacientes con EM presentan déficit en el recuerdo a largo plazo de esta habilidad. Cuando se valoró aquellos sujetos que presentaban alteración en memoria declarativa y funciones frontales se observó que estos presentaban déficit en la fase de aprendizaje de las habilidades cognitivas. La alteración en pruebas frontales es el indicador que mejor explica el rendimiento en el aprendizaje de habilidades cognitivas. En las pruebas de aprendizaje sensoriomotor, las variables clínicas, en especial la forma de evolución, los índices de alteración cognitiva en funciones frontales, memoria declarativa y recuerdo a largo son las variables que presentan un valor explicativo más importante. En cuanto al estudio realizado con RM se observó que el peor rendimiento en el aprendizaje de habilidades cognitivas y sensoriomotoras está asociado con una mayor carga lesional detectada en imágenes potenciadas en T1 y densidad de protones.

TÍTULO: *Estudio de los cambios regionales en el flujo sanguíneo cerebral mediante tomografía por emisión de fotón simple y su correlación neuropsicológica en el trastorno bipolar*

DOCTORAND/A: Antoni Benabarre Pascual

FACULTAT: Medicina

DIRECTOR/S: Manuel Valdés Miyar, Eduard Vieta Pascual

RESUM:

Fundamentos: Para algunos trastornos psiquiátricos se ha podido establecer que existe relación entre las disfunciones cognitivas y las alteraciones en el FSCr. Para el trastorno bipolar (TB), distintos trabajos previos han sugerido que los pacientes con este trastorno presentan disfunciones cognitivas. Asimismo, en distintos estudios han sido halladas alteraciones en la distribución del flujo sanguíneo cerebral regional (FSCr) de estos pacientes. No obstant, no existe ningún trabajo publicado en que se halla estudiado la relación entre ambos tipos de marcadores en pacientes con TB.

Objetivos: Determinar las posibles alteraciones en el rendimiento neuropsicológico y en el FSCr de los pacientes con TB y establecer la relación entre ambos tipos de marcadores y con la psicopatología propia del trastorno.

Pacientes y Métodos: Se incluyeron 43 pacientes con TB (RDC) que se clasificaron según su fase en la enfermedad a partir de la puntuación obtenida en las escalas YMRS y HDRS en fase maníaca (n=7), hipomaníaca (n=8), depresiva (n=12) o eutímica (n=3) y 6 sujetos control. Se evaluó además el estado clínico mediante las escalas PANSS y GAF, la función cognitiva mediante los tests neuropsicológicos WAIS, WCST, Stroop, TMT, CVLT, WMS y FAS/COWAT y se obtuvieron imágenes SPECT administrando el contraste radiológico ^{99m}Tc-HMPAO.

Resultados: Las principales correlaciones halladas fueron entre: función ejecutiva (WCST) y FSCr de estriado, frontal, temporal, cerebelo, parietal y cingulado; función mnésica (WMS, WAIS-dígitos) y FSCr de estriado, frontal temporal y parietal; tareas atencionales (Stroop) y FSCr de estriado, temporal media y parietal; aprendizaje verbal (CVLT) y FSCr de frontal, temporal posterior, cingulado y occipital; alteraciones psicomotoras (TMT) y FSCr de temporal anterior; empeoramiento intelectual (WAIS-Vocabulario) y FSCr de cerebelo y parietal.

Conclusiones: Los resultados del estudio corroboran las hipótesis actuales que señalan la existencia de anomalías funcionales en estructuras fronto-subcorticales, cerebelo y sistema límbico en el TB.

Palabras clave: Trastorno bipolar, Depresión, Manía, Trastornos Cognitivos, Neuroimagen, SPECT, Neuropsicología.

TÍTOL: *Estudio prospectivo del efecto de la sintomatología depresiva en la evolución del recuento de células CD4 y CD8 en pacientes VIH+ asintomáticos*

DOCTORAND/A: Jordi Blanch Andreu

FACULTAT: Medicina

DIRECTOR/S: Cristòbal Gastó Ferrer

RESUM:

Introducción: Estudios previos han observado resultados contradictorios en relación a la asociación entre la presencia de sintomatología depresiva y signos clínicos e inmunológicos de progresión de la infección por el virus de la inmunodeficiencia humana (VIH). La mayor parte de estos estudios se realizaron antes de la introducción de las nuevas combinaciones de tratamientos antirretrovirales y mostraban importantes limitaciones debidas al sesgo en la captación de los pacientes, la falta de criterios psiquiátricos estandarizados, o la falta de control de posibles factores de confusión relacionados con variables médicas o relativas al tratamiento.

Objetivo: Estudiar la relación entre la sintomatología depresiva y cambios en los valores inmunitarios (CD4 y CD8) durante un período de 2 años en una muestra de pacientes VIH+ asintomáticos.

Método: Sesenta y cinco pacientes VIH+ asintomáticos y que acudían de forma consecutiva y por primera vez al dispensario del Servicio de Enfermedades Infecciosas fueron evaluados de forma periódica cada 4 meses durante 2 años. La sintomatología depresiva se medía mediante el Inventario de Depresión de Beck (Beck Depression Inventory , BDI). Como variable dependiente se utilizaron los valores del recuento de linfocitos CD4 y CD8 en sangre periférica. Se examinó la asociación entre la puntuación en el BDI y los valores de CD4 y CD8 mediante el análisis univariante y multivariante de regresión lineal con efectos aleatorios (random-effects linear regression) del programa estadístico STATA 7.0, controlando el efecto de variables relacionadas con las características de los pacientes, con la infección y su tratamiento y el momento de la evaluación.

Resultados: La vía de contagio sexual ($=1,271$; $p = 0,001$; IC 95% = 1,108-1,457) y el hecho de tomar tratamiento ARV durante algún momento del seguimiento ($=1,215$; $p = 0,003$; IC 95% = 1,067-1,383) se asociaban de forma independiente con el aumento en el recuento de células CD4. Ni la intensidad ni la duración de la sintomatología depresiva se asociaban a cambios en el recuento de células linfocitarias.

Conclusión: Controlando posibles factores de confusión presentes en estudios previos, no parece existir ninguna evidencia de que la sintomatología depresiva esté asociada a la evolución de la infección por el virus de la inmunodeficiencia humana.

TÍTOL: *Caracterització de les alteracions cognitives en persones amb Queixes de Pèrdua de Memòria: perfils neuropsicològics, evolutius i diferencials respecte a la Malaltia d'Alzheimer*

DOCTORAND/A: Joana Guarch i Domènech

FACULTAT: Medicina

DIRECTOR/S: Teodor Marcos Bars

RESUM:

Presentació: Els últims anys s'han proposat nombrosos termes teòrics per intentar delimitar la condició cognitiva caracteritzada per queixes de pèrdua de memòria que no s'expliquen per l'edat ni tenen relació amb condicions de demència i que poden objectivar-se amb proves psicomètriques, però que no repercuteixen en altres àrees de la vida de la persona que les pateix. Així s'ha parlat dels *Oblits Benignes de la Senectud* (Kral, 1958), *Alteracions de la Memòria Associades a l'Edat*, (AAMI) (Crook i col. 1986); *Oblits del Final de vida* (LLF) (Blackford i La Ruè, 1989), *Deterioració Cognitiva Lleu* (Flicker i col. 1991), *Declinar de la Memòria en Relació a l'Edat* (Levi i col. 1994). *Trastorn Cognitiu Lleu* (OMS; ICD-10, 1994) entre altres; els treballs de l'equip de Petersen (1994, 1995, 1999, 2000) suggereixen que aquests estats conceptualitzats com a *Disfunció Cognitiva Lleu* (MCI), poden constituir un estadi de transició cap a la deterioració i representar un risc elevat de la probabilitat de desenvolupar la Malaltia d'Alzheimer, amb unes taxes de conversió anuals d'entre el 10% i 25% (Petersen, 2001). **Objectiu:** El treball que ha constituït la tesi pretenia la caracterització neuropsicològica de persones sanes que es queixaven de pèrdues de memòria, sense altres alteracions cognitives, mèdiques ni funcionals i amb independència de l'assignació teòrica o categoria diagnòstica que se'ls atorgués. **Hipòtesi:** L'avaluació neuropsicològica àmplia ha de permetre evidenciar rendiments cognitius característics, diferencials i pronòstics de l'evolució cap a condicions de demència en les persones que es queixen de pèrdua de memòria. **Procediment:** Es va comparar el rendiment neuropsicològic d'aquestes persones caracteritzades per l'autoapreciació de la pèrdua de memòria (N=62) amb les execucions de persones diagnosticades de demència (*DSM-IV*) i *Malaltia d'Alzheimer Probable* (*NINCDS-ADRDA*) (N=51) i amb les de persones Control sense queixes de pèrdua de memòria ni dèficits funcionals atribuïbles a afectació d'aquesta àrea cognitiva (N=34). Es va poder realitzar avaluació de seguiment en les persones dels grups Queixes de Pèrdua de Memòria (N=43) i Alzheimer Probable (N=15) en un període d'entre 18-24 mesos des de la primera Exploració. L'examinador desconeixia l'assignació diagnòstica dels subjectes en el moment de l'avaluació a excepció de les persones del grup control. **Avaluació:** S'administrà una àmplia bateria neuropsicològica per valorar les funcions cognitives següents: Orientació, Formació de Conceptes, Memòria Verbal i Visual a Curt i Mig Termini, Atenció, Aparentatge Associatiu, Intel·ligència General, Funcions Instrumentals (pràxies, perceptivomotriu), Funcions Visuals i Fluïdesa Verbal. Es realitzava una entrevista per recollir dades biogràfiques i sociodemogràfiques i s'administrà el questionari Mini-Mult (Kincannon, 1968; forma abreujada de l'MMPI) per a la valoració de trets psicopatològics de personalitat. **Resultats:** De les dades sociodemogràfiques destaca l'absència de diferències significatives entre els grups pel que fa a edat, anys d'escolaritat, distribució de sexes i temps transcorregut entre la primera i la segona avaluació. Els perfils de rendiments mostren que neuropsicològicament l'estat cognitiu de les persones amb Queixes de Pèrdua de Memòria se situa en un nivell intermig: a més de la memòria presenta disminució en altres funcions cognitives respecte el grup Control, però en cap cas aquests dèficits arriben al nivell de la deterioració que caracteritza el grup Alzheimer Probable. Evolutivament els rendiments en el grup Alzheimer van empitjorant; en canvi en el grup Queixes de Pèrdua de Memòria els perfils són idèntics i indiquen estabilitat cognitiva. En comprovar l'assignació diagnòstica, segons criteris clínic-neurològics, dels subjectes estudiats evolutivament, alguns dels classificats inicialment en el grup Queixes de Pèrdua de Memòria amb el temps ha canviat al grup Alzheimer; comparant aquests dos subgrups, els que mantenen el diagnòstic segueixen caracteritzant-se per l'estabilitat cognitiva, en canvi el subgrup "canvi de diagnòstic" empitjora els rendiments, els quals ja eren significativament inferiors a la resta del grup en la primera avaluació i són més coincidents amb el perfil neuropsicològic dels pacients amb el diagnòstic de Malaltia d'Alzheimer Probable. **Conclusions:** 1.- En el grup de persones amb Queixes de Pèrdua de Memòria pot identificar-se un subgrup de subjectes amb rendiments deficitaris en Memòria Aparentatge, Formació de Conceptes, Funcions Verbals d'Intel·ligència General i alentiment en Funcions Executives. Aquest perfil neuropsicològic és similar al de pacients amb la Malaltia d'Alzheimer Probable, però clínicament encara no manifesten símptomes destacables per a rebre aquest diagnòstic, 2.- Per aquest motiu, és convenient l'exploració neuropsicològica àmplia en persones amb Queixes de Pèrdua de Memòria encara que no presentin repercussions en la vida diària, 3.- Entre aquestes persones, és recomanable el seguiment d'aquelles que presentin perfil neuropsicològic de dèficits en altres àrees cognitives a més de la Memòria.

TÍTOL: *La rehabilitació neuropsicològica del pacient esquizofrènic*

DOCTORAND/A: Rafael Penadés Rubio

FACULTAT: Medicina

DIRECTOR/S: Manel Salamero Baró, Teresa Boget Lluçà

RESUM:

L'objectiu general d'aquesta tesi és valorar la utilitat del tractament de rehabilitació neuropsicològica en pacients esquizofrènic amb dèficits cognitius i predomini de la simptomatologia negativa. El programa utilitzat és l'anomenat Teràpia Integrada de l'Esquizofrènia (IPT, *Integriertes Psychologisches Therapieprogramm*) dissenyat pel grup de Brenner que disposa d'un manual protocolitzat a més d'un model teòric susceptible d'estudi empíric. Els efectes de la rehabilitació són analitzats a tres àmbits diferents: funcions cognitives, funcionalisme cerebral mesurat a partir de SPECT i funcionament psicosocial.

Per a la realització dels diferents estudis hem aplegat una mostra de 94 pacients diagnosticats d'esquizofrènia amb predomini de la simptomatologia negativa. D'aquests pacients 27 complien els criteris d'inclusió pel que fa a simptomatologia negativa i també el criteri qualitatiu de deterioració cognitiva que queda definit a l'estudi. Aquests pacients han estat sotmesos al tractament de rehabilitació neuropsicològica durant tres mesos. A una mostra de 10 pacients se'ls hi va estudiar amb mètodes de neuroimatge amb SPECT. Un grup de pacients amb predomini dels símptomes negatius però sense dèficit cognitiu han actuat com a control.

La part experimental consta de quatre estudis, tres dels quals ja han estat publicats i un està acceptat per publicació. En aquests estudis hem pogut demostrar que els dèficits cognitius s'associen a un pronòstic més pernicios: evolució més cronificada, nivell més baix d'adaptació general, estades més llargues d'hospitalització i una adherència més pobre al tractament farmacològic. Els resultats recolzen que el tractament de rehabilitació neuropsicològica és útil i produeix millores a les funcions prèviament deficitàries. Tal i com estableix el model de Brenner, els canvis a les funcions cognitives elementals (atenció i codificació) estan lligades als canvis a les funcions cognitives més superiors (recuperació i funció executiva). I el que és més important, la millora neuropsicològica està associada a una millora del funcionament psicosocial concretament un augment de l'autonomia personal i del funcionament psicosocial general. Per altra banda el tractament de rehabilitació neuropsicològica produeix canvis en el flux sanguini cerebral frontal detectable mitjançant estudis d'SPECT realitzats en condicions de neuroactivació. Aquests canvis suposen una reducció de la hipofrontalitat que es deu a la millora del funcionament neuropsicològic.

Per tant l'estudi ha pogut confirmar les hipòtesis i es pot concloure que la rehabilitació neuropsicològica és una eina terapèutica que possibilita una millora del funcionament cognitiu, una reducció de l'hipofuncionalisme del flux cerebral frontal, un augment de l'autonomia personal i una millora del funcionament psicosocial als pacients esquizofrènic de pitjor pronòstic.

TÍTOL: *Funciones neuropsicológicas en la terapia electroconvulsiva de mantenimiento.*

DOCTORAND/A: Lorena Rami González

FACULTAT: Medicina

DIRECTOR/S: M. Bernardo, M. Salamero

RESUM:

A pesar de la mejoría considerable de las condiciones de aplicación de la Terapia Electroconvulsiva (TEC) en los últimos años, las alteraciones cognitivas siguen siendo uno de los principales efectos secundarios. Después de un curso con tratamiento de TEC se produce una disfunción para recordar hechos pasados y memorizar nueva información que es transitoria y que desaparece después de tres a seis meses de la finalización del tratamiento.

En los últimos años la terapia Electroconvulsiva de Mantenimiento (TEC-M) se ha consolidado como un tratamiento profiláctico en trastornos psiquiátricos graves y recurrentes. Las investigaciones en el campo de la TEC-M se basan en su efectividad clínica y pocos estudios han evaluado los efectos cognitivos adversos de esta modalidad de tratamiento con TEC. Los datos se extrapolan de estudios de casos únicos o de evaluaciones cognitivas globales con la prueba del MMSE.

El objetivo de nuestra investigación fue estudiar las funciones neuropsicológicas en pacientes psiquiátricos durante el tratamiento con TEC-M. Exploramos pacientes depresivos, esquizofrénicos y bipolares durante el tratamiento con TEC-M y comparamos el rendimiento de estos pacientes con un grupo de pacientes psiquiátricos controles que nunca habían sido tratados con TEC. Además realizamos un estudio longitudinal en pacientes que habían realizado TEC-M durante un año, para determinar el impacto sobre las funciones cognitivas de un año de tratamiento.

Utilizamos una batería neuropsicológica amplia que evaluase las principales áreas cognitivas: memoria, atención, funciones ejecutivas frontales y lenguaje. Como escalas clínicas utilizamos la Escala de Depresión de Hamilton (HDRS).

No encontramos diferencias significativas en el rendimiento cognitivo entre los pacientes esquizofrénicos durante el tratamiento con TEC-M y los controles.

Por el contrario, los pacientes depresivos en TEC-M presentaban una alteración significativa de las funciones frontales y de la memoria inmediata respecto a aquellos pacientes depresivos que nunca habían sido tratados con TEC. Sin embargo existen numerosas variables de confusión que no pudimos controlar y que pueden interferir en los resultados que obtuvimos.

Los resultados del estudio longitudinal indican que no existe un deterioro cognitivo significativo después de seguir un año de tratamiento con TEC-M.

TÍTOL: *Síntomas somáticos médicamente inexplicados en el hospital general*

DOCTORAND/A: Teresa Rangil Muñoz

FACULTAT: Medicina

DIRECTOR/S: Cristòbal Gastó Ferrer

RESUM:

Antecedentes: Los síntomas somáticos médicamente inexplicados (SSMI) son un importante problema sanitario, con alta prevalencia en mujeres y una estrecha relación con la patología afectiva. En este estudio nos propusimos estudiar las características de los SSMI en una muestra de pacientes médicos hospitalizados. Sujetos, material y método: El estudio se realizó durante 18 meses sobre los pacientes médico-quirúrgicos ingresados en un hospital general, con un rango de edad de 18-74 años. Participaron 1.822 sujetos. Durante los primeros días del ingreso los pacientes completaron varios cuestionarios autoadministrados: El Cuestionario de Salud del Paciente (PHQ), con una sección de 13 síntomas somáticos presentes durante el último mes, el Inventario de Depresión de Beck (BDI), la Escala Autoadministrada de Ansiedad de Zung (SAS) y la Encuesta de Salud General del MOS (SF-20). Además, 1.003 pacientes recibieron una entrevista semiestructurada para diagnósticos psiquiátricos. Igualmente se revisaron las historias clínicas para recoger los diagnósticos médicos, evaluando de forma ciega a las variables psicopatológicas la congruencia o no de los síntomas somáticos que el paciente había referido en su respuesta al PHQ. Resultados: El 29% de los pacientes tenían al menos un SSMI, el 13% tenían dos o más y el 7% tenían al menos tres (criterios de trastorno multisomatomorfo). Las mujeres presentaban un número mayor de SSMI que los varones y era significativamente más frecuente que cumplieran criterios de trastorno multisomatomorfo (el 11% frente al 3%). Representaban el 38% de los pacientes que no tenían ningún SSMI, el 58% de los que tenían uno, el 66% de los que tenían dos y el 73% de los que tenían tres o más. El trastorno multisomatomorfo estaba presente en el 34% de las depresiones mayores, el 48% de los trastornos de pánico y el 25% de la ansiedad significativamente más alto en el BDI (especialmente en la subescala cognitivo-afectiva) y recibían diagnósticos de depresión mayor en el 36%, de trastorno de pánico en el 19% y de ansiedad generalizada en el 56%. En total, el 67% presentaban algún trastorno ansioso o depresivo. Tanto las puntuaciones en el BDI como la frecuencia de trastornos ansiosos y depresivos aumentaba progresivamente a medida que aumentaba el número de SSMI. Los SSMI se relacionaban de forma progresiva e independiente con un deterioro de la calidad de vida medido en el SF-20. El perfil de afectación del trastorno multisomatomorfo sobre estas escalas era igualmente diferente al de los trastornos ansiosos o depresivos. No había sin embargo relación con el número de días de incapacidad ni con el número de visitas médicas en los tres meses previos y sólo discretamente con la duración de la estancia hospitalaria que era 2,7 días más larga en el caso del trastorno multisomatomorfo. Discusión y conclusiones: Los SSMI presentaban una prevalencia intermedia entre las encontradas en atención primaria y las de población general. Se distribuían en un continuo de gravedad, de forma que la presencia de un único síntoma ya producía un efecto significativo sobre variables sociodemográficas, calidad de vida o comorbilidad psiquiátrica. Se asociaban estrechamente con patología ansiosa y depresiva, pero a pesar de ello constituían una entidad independiente, con afectación específica sobre calidad de vida y con una tercera parte de pacientes con trastorno multisomatomorfo que no cumplían criterios de ningún trastorno ansioso ni depresivo. Las mujeres presentaban más SSMI que los varones, pero no sólo en las formas más graves de trastorno somatomorfo sino en cualquier forma de presentación menor. Los SSMI tenían una influencia negativa específica e independiente sobre calidad de vida, pero no de forma significativa con dos medidas de utilización de recursos sanitarios.

6. LLISTAT DE PUBLICACIONS AMB FACTOR D'IMPACTE

6.1. Subunitat de Psiquiatria

1. Benabarre A, Vieta E, Martinez-Aran A, Reinares M, Colom F, Lomena F, Martin F, **Valdes M.**

The somatics of psyche: structural neuromorphometry of bipolar disorder

Psychother Psychosom 2002 Jul-Aug;71(4):180-9

IF= 3,188

2. Blanch J, Rousaud A, Hautzinger M, Martinez E, Peri JM, Andres S, Cirera E, Gatell JM, **Gasto C.**

Assessment of the efficacy of a cognitive-behavioural group psychotherapy programme for HIV-infected patients referred to a consultation-liaison psychiatry department.

Psychother Psychosom 2002 Mar-Apr;71(2):77-84

IF= 3,188

3. Castro J, **Toro J**, Lazaro L, Pons F, Halperin I.

Bone mineral density in male adolescents with anorexia nervosa.

J Am Acad Child Adolesc Psychiatry 2002 May;41(5):613-8

IF= 3,662

4. Colom F, Vieta E, Martinez-Aran A, Garcia-Garcia M, Reinares M, Torrent C, Goikolea JM, Banus S, **Salamero M.**

Spanish version of a scale for the assessment of mania: validity and reliability of the Young Mania Rating Scale]

Med Clin (Barc) 2002 Sep 28;119(10):366-71

IF= 0,854

5. Corominas A, Guerrero T, **Vallejo J.**

Residual symptoms and comorbidity in panic disorder.

Eur Psychiatry 2002 Nov;17(7):399-406

IF= 1,327

6. Gomez-Gil E, Trilla A, Corbella B, Fernandez-Egea E, Luburich P, **de Pablo J**, Ferrer Raldua J, **Valdes M.**

Lack of clinical relevance of routine chest radiography in acute psychiatric admissions.

Gen Hosp Psychiatry 2002 Mar-Apr;24(2):110-3

IF= 1,542

7. Gomez-Gil E, **Gasto C**, Diaz-Ricart M, Carretero M, **Salamero M**, Catalan R, Escolar .

Platelet 5-HT_{2A}-receptor-mediated induction of aggregation is not altered in major depression.

Hum Psychopharmacol 2002 Dec;17(8):419-24

IF= 1,215

8. Martinez-Aran A, Penades R, Vieta E, Colom F, Reinares M, Benabarre A, **Salamero M**, **Gasto C.**

Executive function in patients with remitted bipolar disorder and schizophrenia and its relationship with functional outcome.

Psychother Psychosom 2002 Jan-Feb;71(1):39-46

IF= 3,188

9. Martinez-Aran A, Vieta E, Colom F, Reinares M, Benabarre A, Torrent C, Goikolea JM, Corbella B, Sanchez-Moreno J, **Salamero M**.
Neuropsychological performance in depressed and euthymic bipolar patients
Neuropsychobiology 2002;46 Suppl 1:16-21
IF= 2,065
10. Mataix-Cols D, Alonso P, Pifarre J, Menchon JM, **Vallejo J**.
Neuropsychological performance in medicated vs. unmedicated patients with obsessive-compulsive disorder.
Psychiatry Res 2002 Apr 15;109(3):255-64
IF= 1,808
11. Pintor L, Torres X, Navarro V, **Gasto C**.
[Major depressive episode: a study of remission and relapses]
Med Clin (Barc) 2002 Jan 26;118(2):41-6
IF= 0,854
12. Prieto JM, Blanch J, Atala J, Carreras E, Rovira M, Cirera E, **Gasto C**.
Psychiatric morbidity and impact on hospital length of stay among hematologic cancer patients receiving stem-cell transplantation.
J Clin Oncol 2002 Apr 1;20(7):1907-17
IF= 9,868
13. Pujol J, Lopez A, Deus J, Cardoner N, **Vallejo J**, Capdevila A, Paus T.
Anatomical variability of the anterior cingulate gyrus and basic dimensions of human personality.
Neuroimage 2002 Apr;15(4):847-55
IF= 5,624
14. Pujol J, Cardoner N, Benlloch L, Urretavizcaya M, Deus J, Losilla JM, Capdevila A, **Vallejo J**.
CSF spaces of the Sylvian fissure region in severe melancholic depression
Neuroimage 2002 Jan;15(1):103-6
IF= 5,624
15. Rosel P, Arranz B, Urretavizcaya M, Oros M, San L, **Vallejo J**, Navarro MA.
Different distributions of the 5-HT reuptake complex and the postsynaptic 5-HT(2A) receptors in Brodmann areas and brain hemispheres.
Psychiatry Res 2002 Aug 30;111(2-3):105-15
IF= 1,808
16. **Vallejo J**, Rosel P, Arranz B, Urretavizcaya M, Menchon JM, Contreras F, Navarro A.
Loss of the circadian variation of platelet [3H]imipramine binding in delusional compared with non-delusional endogenously depressed patients.
J Affect Disord 2002 Oct;72(1):95-101
IF= 2,176

6.2. Subunitat Psicobiologia

1. **Adan A**, Natale V.

Gender differences in morningness-eveningness preference.

Chronobiol Int 2002 Jul;19(4):709-20

IF= 1,595

2. **Bartres-Faz D, Junque C, Serra-Grabulosa JM**, Lopez-Alomar A, Moya A, Bargallo N, Mercader JM, Moral P, **Clemente IC**.

Dopamine DRD2 Taq I polymorphism associates with caudate nucleus volume and cognitive performance in memory impaired subjects.

Neuroreport 2002 Jul 2;13(9):1121-5

IF= 2,265

3. **Bartres-Faz D, Junque C, Clemente IC**, Lopez-Alomar A, Bargallo N, Mercader JM, Moral P.

Relationship among (1)H-magnetic resonance spectroscopy, brain volumetry and genetic polymorphisms in humans with memory impairment.

Neurosci Lett 2002 Jul 26;327(3):177-80

IF= 2,100

4. **Bartres-Faz D, Clemente IC**, Monras M, Munoz M, Lopez-Alomar A, Valveny N, Moral P, Gual A, **Sanchez-Turet M**, Guardia J, **Junque C**.

Relation of Apo E and ACE genes to cognitive performance in chronic alcoholic patients

Addict Biol 2002 Apr;7(2):227-33

IF= 0,671

5. **Bartres-Faz D, Junque C**, Moral P, Lopez-Alomar A, Sanchez-Aldeguer J, **Clemente IC**.

Apolipoprotein E gender effects on cognitive performance in age-associated memory impairment.

J Neuropsychiatry Clin Neurosci 2002 Winter;14(1):80-3

IF= 2,212

6. Brugal MT, Barrio G, De LF, Regidor E, Royuela L, **Suelves JM**.

Factors associated with non-fatal heroin overdose: assessing the effect of frequency and route of heroin administration.

Addiction. 2002 Mar;97(3):319-27.

IF= 2,877

7. Darbra S, **Prat G**, Pallares M, Ferre N.

Tolerance and sensitization to the hypnotic effects of alcohol induced by chronic voluntary alcohol intake in rats.

J Psychopharmacol 2002 Mar;16(1):79-83

IF= 3,173

8. **Escera C, Corral MJ, Yago E**.

An electrophysiological and behavioral investigation of involuntary attention towards auditory frequency, duration and intensity changes.

Brain Res Cogn Brain Res 2002 Nov;14(3):325-32

IF= 2,404

9. Gorwood P, Ades J, Bellodi L, Cellini E, Collier DA, Di Bella D, Di Bernardo M, Estivill X, **Fernandez-Aranda F**, Gratacos M, Hebebrand J, Hinney A, Hu X, Karwautz A, Kipman

A, Mouren-Simeoni MC, Nacmias B, Ribases M, Remschmidt H, Ricca V, Rotella CM, Sorbi S, Treasure J; EC Framework V 'Factors in Healthy Eating' consortium.

The 5-HT(2A) -1438G/A polymorphism in anorexia nervosa: a combined analysis of 316 trios from six European centres.

Mol Psychiatry 2002;7(1):90-4

IF= 5,497

10. **Maneru,-Cristina; Junque,-Carme;** Botet,-Francesc; Tallada,-Merce; **Segarra,-Dolors; Narberhaus,-Ana**

Memoria declarativa y procedimental en adolescentes con antecedentes de asfixia perinatal. / Declarative and procedural memory in adolescents with antecedents of perinatal asphyxia.

Psicothema. 2002 May; Vol 14(2): 463-468

IF= 1,098

11. Mones J, **Adan A,** Segu JL, Lopez JS, Artes M, Guerrero T.

Quality of life in functional dyspepsia.

Dig Dis Sci 2002 Jan;47(1):20-6

IF= 1,438

12. Natale V, **Adan A,** Chotai J.

Further Results on the Association between Morningness-Eveningness Preference and the Season of Birth in Human Adults.

Neuropsychobiology 2002;46(4):209-14

IF= 2,065

13. Poca MA, Sahuquillo J, Busto M, Rovira A, Capellades J, **Mataro M,** Rubio E.

Agreement between CSF flow dynamics in MRI and ICP monitoring in the diagnosis of normal pressure hydrocephalus. Sensitivity and specificity of CSF dynamics to predict outcome.

Acta Neurochir Suppl 2002;81:7-10

IF= 0,779

14. Polo MD, Newton P, Rogers D, **Escera C,** Butler S.

ERPs and behavioural indices of long-term preattentive and attentive deficits after closed head injury.

Neuropsychologia 2002;40(13):2350-9

IF= 3,184

15. **Salgado-Pineda P, Vendrell P,** Bargallo N, Falcon C, **Junque C.**

[Functional magnetic resonance in the evaluation of the activity of the anterior cingulate cortex using Stroop's paradigm]

Rev Neurol 2002 Apr 1-15;34(7):607-11

[Article in Spanish]

IF= 0,289

16. **Serra Grabulosa JM, Sanchez Turet M, Grau C, Escera C.**

[The potential P300 in the evaluation of the side effects of dexchlorpheniramine]

Rev Neurol 2002 Aug 16;35(4):306-10

IF= 0,289

17. **Serra-Grabulosa JM, Sanchez-Turet M, Grau C.**

[The secondary effects of the antihistamine chlorpheniramine on the central nervous system]

Rev Neurol 2002 Jun 16-30;34(12):1178-82

[Article in Spanish]

IF= 0,289

18. **Summerfield C**, Gomez-Anson B, Tolosa E, Mercader JM, Marti MJ, Pastor P, **Junque C**.

Dementia in Parkinson disease: a proton magnetic resonance spectroscopy study.

Arch Neurol 2002 Sep;59(9):1415-20

IF= 4,336

*Revisions***1. Maneru C, Junque C.**

[Cognitive deficit in perinatal asphyxia]

Rev Neurol 2002 Jun 16-30;34(12):1171-7

IF= 0,289

2. Portella MJ, Marcos T.

[Frontal lobe involvement in elderly major depression]

Rev Neurol. 2002 Nov 1-15;35(9):891-4.

Review. Spanish.

IF= 0,289

3. Pueyo Benito R, Vendrell Gomez P, Bargallo Alabart N, Mercader Sobreques JM

[Neuroimaging and cerebral palsy]

[Article in Spanish]

Rev Neurol. 2002 Sep 1;35(5):463-9.

IF= 0,289

4. Pueyo-Benito R, Vendrell-Gomez P.

[Neuropsychology of cerebral palsy]

[Article in Spanish]

Rev Neurol. 2002 Jun 1-15;34(11):1080-7.

IF= 0,289

5. Sanchez Turet M, Serra Grabulosa JM.*Rev Neurol* 2002 Dec 1-15;35(11):1049-55

[Auditory evoked potentials and alcohol: characteristics of the Mismatch negativity component in alcoholism]

IF= 0,289

6.3. Publicacions conjuntes de les dues subunitats**1, Bussolotti D, Fernandez-Aranda F, Solano R, Jimenez-Murcia S, Turon V, Vallejo J.**

Marital status and eating disorders. An analysis of its relevance.

J Psychosom Res 2002 Dec;53(6):1139-45

IF= 1,809

2. Jurado MA, Junque C, Vallejo J, Salgado P, Grafman J.

Obsessive-compulsive disorder (OCD) patients are impaired in remembering temporal order and in judging their own performance.

J Clin Exp Neuropsychol 2002 May;24(3):261-9

IF= 1,333

3. Massana G, Gasto C, Junque C, Mercader JM, Gomez B, Massana J, Torres X, Salamero M.

Reduced levels of creatine in the right medial temporal lobe region of panic disorder patients detected with (1)H magnetic resonance spectroscopy

Neuroimage 2002 Jul;16(3 Pt 1):836-42

IF= 5,624

4. Navarro V, Gasto C, Lomena F, Mateos JJ, Marcos T, Portella MJ.

Normalization of frontal cerebral perfusion in remitted elderly major depression: a 12-month follow-up SPECT study.

Neuroimage 2002 Jul;16(3 Pt 1):781-7
IF= 5,624

5. Penades R, **Boget T**, Lomena F, Mateos JJ, Catalan R, **Gasto C, Salamero M**.
Could the hypofrontality pattern in schizophrenia be modified through neuropsychological rehabilitation?

Acta Psychiatr Scand 2002 Mar;105(3):202-8
IF= 2,259

6. **Rami-Gonzalez L, Boget-Llucia T, Bernardo M, Marcos T, Canizares-Alejos S**, Penades R, **Portella MJ**, Castelvi M, Raspall T, **Salamero M**.

Selective alteration of the declarative memory systems in patients treated with a high number of electroconvulsive therapy sessions

Rev Neurol 2002 Nov 1-15;35(9):805-8
IF= 0,289

6.4. Llistat, freqüència i factor d'impacte de les revistes que han publicat articles o revisions dels membres del departament durant l'any 2002

REVISTA	N	IF
<i>Acta Neurochir Suppl</i>	1	0,779
<i>Acta Psychiatr Scand</i>	1	2,259
<i>Addict Biol</i>	1	0,671
<i>Addiction.</i>	1	2,877
<i>Arch Neurol</i>	1	4,336
<i>Brain Res Cogn Brain Res</i>	1	2,404
<i>Chronobiol Int</i>	1	1,595
<i>Dig Dis Sci</i>	1	1,438
<i>Eur Psychiatry</i>	1	1,327
<i>Gen Hosp Psychiatry</i>	1	1,542
<i>Hum Psychopharmacol</i>	1	1,215
<i>J Affect Disord</i>	1	2,176
<i>J Am Acad Child Adolesc Psychiatry</i>	1	3,662
<i>J Clin Exp Neuropsychol</i>	1	1,333
<i>J Clin Oncol</i>	1	9,868
<i>J Neuropsychiatry Clin Neurosci</i>	1	2,212
<i>J Psychopharmacol</i>	1	3,173
<i>J Psychosom Res</i>	1	1,809
<i>Med Clin Barc</i>	2	0,854
<i>Mol Psychiatry</i>	1	5,497
<i>Neuroimage</i>	3	5,624
<i>Neuropsychobiology</i>	2	2,065
<i>Neuropsychologia</i>	1	3,184
<i>Neuroreport</i>	1	2,265
<i>Neurosci Lett</i>	1	2,100
<i>Psicothema</i>	1	1,098
<i>Psychiatry Res</i>	2	1,808
<i>Psychother Psychosom</i>	3	3,188
<i>Rev Neurol</i>	9	0,289
TOTAL	44	97,311

7. RESUMS DELS ARTICLES AMB FACTOR D'IMPACTE**7.1. Subunitat de Psiquiatria**

Benabarre A, Vieta E, Martinez-Aran A, Reinares M, Colom F, Lomena F, Martin F, Valdes M.

The somatics of psyche: structural neuromorphometry of bipolar disorder.

Psychother Psychosom 2002 Jul-Aug;71(4):180-9

Bipolar Disorders Program and Nuclear Medicine Department, Barcelona Stanley Foundation Research Center, Hospital Clinic, University of Barcelona, IDIBAPS, Barcelona, Spain. evieta@clinic.ub.es

Many neuroimaging investigations report structural differences in subjects with bipolar disorder; however, conflicting results are common in the limited number of available investigations. Thus, the structural correlates of bipolar disorders remain poorly understood. The authors reviewed the early investigations using computed tomography and examined gross structural differences, such as cerebral atrophy, ventricular enlargement, or cerebellar atrophy. Many of these investigations report significant differences in these features compared with controls, whereas others found no such differences. More recent magnetic resonance imaging (MRI) investigations have employed increasingly sophisticated imaging and research methodologies, allowing for the quantitative examination of specific brain regions. Because neuropsychological and functional studies suggest abnormalities in frontal, temporal and subcortical regions, many investigators have focused their MRI neuromorphometric studies on these temporal limbic structures. However, the number of investigations examining each of these regions remains small, and conflicting results continue to be reported. It seems clear that for many brain regions, the structural changes from normal may be subtle, and that the differences in the reported studies may be due to differences in research methodologies between studies and across centers.

Blanch J, Rousaud A, Hautzinger M, Martinez E, Peri JM, Andres S, Cirera E, Gatell JM, Gasto C.

Psychother Psychosom 2002 Mar-Apr;71(2):77-84

Assessment of the efficacy of a cognitive-behavioural group psychotherapy programme for HIV-infected patients referred to a consultation-liaison psychiatry department.

Clinical Institute of Psychiatry and Psychology, Hospital Clinic Universitari de Barcelona, Spain. jblanch@clinic.ub.es

BACKGROUND: Most HIV-infected patients attending a consultation-liaison psychiatry service show symptoms of anxiety and depression. The present study sought to evaluate the immediate and long-term efficacy of a structured cognitive-behavioural group therapy reducing anxiety and depression in HIV-infected patients referred to a consultation-liaison psychiatry department, and to identify baseline variables predictive of greater improvement. **METHODS:** Repeated-measures ANOVA was used to analyse changes in the Beck Depression Inventory (BDI) and the state subscale of the State/Trait Anxiety Inventory (STAI) administered to 39 participants at 4 time points: T1 (1 month before beginning the therapy), T2 (during the first session), T3 (during the last session) and T4 (3 months after the last session). The therapy consisted of 16 weekly 2-hour sessions following a structured time-limited cognitive-behavioural group psychotherapy programme. **RESULTS:** During the intervention time (between T2 and T3) an improvement was observed in depression and anxiety, which persisted after the 3-month follow-up period (between T3 and T4). No changes were observed during baseline (between T1 and T2). Patients with higher levels of anxiety at baseline showed greater improvement in STAI state subscale scores. Transmission of HIV infection through intravenous drug use was associated with less improvement on the BDI. **CONCLUSIONS:** This is the first report of an ongoing study which suggests long-lasting efficacy of a structured cognitive-behavioural group psychotherapy programme in a heterogeneous sample of HIV-1-infected patients referred to a consultation-liaison psychiatry unit.

Castro J, Toro J, Lazaro L, Pons F, Halperin I.
Bone mineral density in male adolescents with anorexia nervosa.
J Am Acad Child Adolesc Psychiatry 2002 May;41(5):613-8

Department of Child and Adolescent Psychiatry and Psychology, Institute of Psychiatry and Psychology, Hospital Clinic Universitari, Barcelona, Spain.jcastro@clinic.ub.es

OBJECTIVES: To determine the percentage of male adolescent patients with abnormal bone mineral density (BMD), to identify the variables related to BMD loss, and to study BMD change after follow-up. **METHOD:** Dual-energy-x-ray absorptiometry tests at the lumbar spine (L2-L4) and the femoral neck were administered in 20 male adolescents with anorexia nervosa (treated from 1997 until 2000 at the Department of Child and Adolescent Psychiatry and Psychology of the Hospital Clinic Universitari in Barcelona). Examinations were repeated in 15 patients after a follow-up of 6 to 24 months. **RESULTS:** Thirty-five percent of patients had osteopenia at the lumbar spine and femoral neck. The following variables were related to osteopenia: >12 months' duration of anorexia ($p = .003$), <3 hours/week of physical activity ($p = .009$), and calcium intake <600 mg/day ($p = .015$). In a stepwise logistic regression analysis to predict spinal BMD with the three variables mentioned above, only months of duration entered in the equation ($\beta = 3.5$, $SE = 1.3$, $p = .008$) and correctly classified 85% of patients. At the follow-up, patients with only partial weight recovery had a BMD loss of 3.2% at lumbar spine and 6.4% at femoral neck, whereas patients with total weight recovery had an increase of 7.8% at lumbar spine and 6.7% at femoral neck. **CONCLUSIONS:** The risk of osteopenia in male adolescents with anorexia of more than 12 months' duration is high. In patients with total weight recovery, BMD increase is higher than normal.

Colom F, Vieta E, Martinez-Aran A, Garcia-Garcia M, Reinares M, Torrent C, Goikolea JM, Banus S, Salamero M.

Med Clin (Barc) 2002 Sep 28;119(10):366-71

[Spanish version of a scale for the assessment of mania: validity and reliability of the Young Mania Rating Scale]

[Article in Spanish]

Servicio de Psiquiatria. Programa de Trastornos Bipolares. Hospital Clinic-IDIBAPS. Stanley Foundation Research Center. Barcelona. Espana.

Background: The Young Mania Rating Scale is the most widely used tool for the assessment of the intensity of manic symptoms. Unfortunately, to date, there was no Spanish validated version available. This study validated the Spanish version of the YMRS. Patients and method: A sample of 541 DSM-IV manic or hypomanic bipolar patients were recruited in 56 different psychiatric settings in Spain and assessed with the YMRS by 112 clinicians specifically trained in its use on days 1, 7, 14, 30, 45 and at 3 and 6 months. The mania subscale of the Clinical Global Impression for Bipolar Disorders was also performed in order to have a standard measure to compare our results. Feasibility, reliability, validity and sensitivity of the YMRS were analysed. Results: The YMRS Spanish version showed reliability index of 0.88 (internal consistency) and 0.76 (test-retest

reliability), and good internal validity and external ($p < 0.001$) when compared to the mania subscale of the Modified Clinical Global Impression. The results also showed good sensitivity and feasibility. Conclusions: The YMRS Spanish Version is a useful, valid and reliable tool for the assessment of manic symptoms.

Corominas A, Guerrero T, Vallejo J.

Residual symptoms and comorbidity in panic disorder.

Eur Psychiatry 2002 Nov;17(7):399-406

Department of Psychiatry, Hospital de Mollet, Cristofol Colom, 1, 08100 Mollet, Barcelona, Spain. corominas@sumi.es

Background: The aim of this study was to assess the outcome of the comorbid conditions of panic disorder after 1 year of treatment, emphasizing the detection of residual symptoms and their relationship to other clinical variables. Methods: Subjects ($N = 64$) were assessed by the Structured Clinical Interview for DSM-III-R and the Eysenck Personality Questionnaire. Comorbidity with other disorders, scores on Hamilton Anxiety Rating Scale and Hamilton Depression Rating Scale were assessed at baseline and after 12 months. Criteria for residual anxiety/somatic symptoms were defined. Results: Reduction in generalized anxiety disorder rates accounted for a significant decrease in comorbidity at 1-year follow-up, with regard to baseline assessment. When the more severe symptoms of the disorder had remitted, a third of the patients referred physical symptoms with some concern over a fluctuating state of anxiety. The said symptoms were neither a recurrence of panic disorder nor did they account for other anxiety or somatoform disorders. Lower scores on extraversion predict higher risk of residual symptoms. Discussion: The persistence of residual anxiety/somatic symptoms in a third of the patients who apparently achieved a good response to treatment of panic disorder might characterize a minor form of chronic persistence of this condition. Conclusions: The subgroup of patients with residual symptoms would not be detectable by follow-up studies, which focus on the assessment of relapse of panic disorder by means of strictly defined diagnostic criteria.

Gomez-Gil E, Trilla A, Corbella B, Fernandez-Egea E, Luburich P, de Pablo J, Ferrer Raldua J, Valdes M.

Lack of clinical relevance of routine chest radiography in acute psychiatric admissions. *Gen Hosp Psychiatry* 2002 Mar-Apr;24(2):110-3

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To make clinically relevant recommendations for chest X-ray testing in acute psychiatric admissions, this study examined the current practice of this screening test in patients admitted to a University Hospital. The records of the 332 first consecutive admissions to the psychiatric ward were assessed. In 200 patients (60%) a chest X-ray was requested. The X-ray film was normal in 81.5% of patients. The remaining subjects presented abnormalities: nonrelevant in twenty-seven (13.5% of the total), and relevant in eleven (5.5%). Since all these relevant abnormalities were already known, in no cases was the test followed by changes in therapy or by additional diagnostic procedures. In almost all cases this screening test was of no practical value. Our findings challenge the systematic indication of chest X-ray in acute psychiatric patients, and suggest that the number of tests performed and the cost of medical care could be reduced by a more efficient use of past medical history and physical examination criteria, without compromising the quality of patient care.

Gomez-Gil E, Gasto C, Diaz-Ricart M, Carretero M, Salamero M, Catalan R, Escolar G. Platelet 5-HT_{2A}-receptor-mediated induction of aggregation is not altered in major depression.

Hum Psychopharmacol 2002 Dec;17(8):419-24

Instituto Clinic de Psiquiatria y Psicologia, Hospital Clinic, Institutd'investigacions Biomediques August Pi i Sunyer (IDIBAPS), Faculty of Medicine, University of Barcelona, Villaroel 170, 08036 Barcelona, Spain. esgomez@clinic.ub.es

BACKGROUND: Studies of the 5-HT_{2A} receptor subtype in major depression have focused on the density of these receptors in neuronal cells and platelets, showing an up-regulation secondary to a deficit in serotonergic activity in major depression. However, their functional state has often been disregarded. The aim of the study was to investigate whether depressed patients show abnormalities in the function of the 5-HT_{2A} receptor pathway in platelets. **METHOD:** The percentage of serotonin-amplified platelet aggregation to adenosine diphosphate (ADP) was assessed in 30 untreated patients with major depressive disorder and in 15 controls. Since 5-HT_{2A} platelet receptors mediate the serotonin-induced platelet aggregation response, this index was used as a measure of the functional status of the platelet 5-HT_{2A} receptor pathway. **RESULTS:** There was no significant difference in the percentage of serotonin-amplified platelet aggregation to ADP between depressed patients and controls. No correlation with the severity of depression, as assessed by the Hamilton scale, was found. **CONCLUSION:** The results showed no consistent changes in the platelet aggregating responses to serotonin in the depressed patients. Therefore this study does not support the hypothesis of an alteration of the functional status of platelet 5-HT_{2A} receptors in major depression.

Martinez-Aran A, Penades R, Vieta E, Colom F, Reinares M, Benabarre A, Salamero M, Gasto C.

Executive function in patients with remitted bipolar disorder and schizophrenia and its relationship with functional outcome.

Psychother Psychosom 2002 Jan-Feb;71(1):39-46

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BACKGROUND: Recent studies have reported that differences in cognitive performance between schizophrenic and bipolar patients seem to be smaller than expected. Patients with schizophrenia have consistently shown frontal executive dysfunctions, but studies regarding executive abilities in bipolar patients are scarce and discrepant. As executive function has been associated with psychosocial functioning in schizophrenia, we wanted to investigate if such a relationship is also present in bipolar disorder and the differences between the two groups. **METHODS:** Executive function was assessed in 49 euthymic (at least 6 months in remission, Hamilton Depression Rating Scale ≤ 8 and Young Mania Rating Scale ≤ 6) bipolar and in 49 schizophrenic, residual-type (with at least 1 year without acute exacerbation and predominant negative symptomatology) patients, by the Wisconsin Card Sorting Test (WCST), FAS Test (COWAT) and Trail Making Test. Baseline clinical and psychosocial variables were controlled and psychopathology evaluated by means of the Positive and Negative Syndrome Scale (PANSS). **RESULTS:** The two groups showed a similar pattern of cognitive deficits in tests of executive function, except for the number of categories achieved in the WCST, which was significantly lower in the schizophrenic group ($F = 7.26$; $p = 0.009$). Functional outcome was predicted by the negative syndrome (PANSSN) and perseverative errors (WCST) in schizophrenic patients, and general psychopathology (PANSSG) was the best predictor of functional outcome in the bipolar group. **CONCLUSION:** Executive function was a good predictor of functional outcome in the schizophrenic group, whereas clinical variables were more predictive of the bipolar one. Patterns of cognitive disturbances in tasks of executive function are similar in both groups but quantitatively more marked in schizophrenia.

Martinez-Aran A, Vieta E, Colom F, Reinares M, Benabarre A, Torrent C, Goikolea JM, Corbella B, Sanchez-Moreno J, Salamero M.

Neuropsychological performance in depressed and euthymic bipolar patients. *Neuropsychobiology* 2002;46 Suppl 1:16-21

Bipolar Disorders Program, Clinical Institute of Psychiatry and Psychology, Hospital Clinic, Barcelona Stanley Medical Institute Research Center, University of Barcelona, Barcelona, Spain.

INTRODUCTION: Recent studies have suggested that the presence of persistent cognitive dysfunctions in bipolar patients is not restricted to acute episodes, but they persist even during remission states. Nevertheless, there are several methodological pitfalls in most studies, such as unclear remission criteria, diagnostic heterogeneity or small sample sizes. **PATIENTS AND METHODS:** Several domains of cognitive function were examined in 30 depressed bipolar patients [DSM-IV criteria for major depression, Hamilton Depression Scale (HDRS) ≥ 17] and 30 euthymic bipolar patients (at least 6 months of remission, HDRS ≤ 8 and Young Mania Rating Scale, YMRS ≤ 6). Psychosocial functioning was assessed through General Assessment of Functioning. **RESULTS:** The two groups showed a similar pattern of neuropsychological performance. However, the depressed group was significantly impaired on the Controlled Oral Word Association Test, FAS (COWAT), a measure of verbal fluency, compared with the euthymic group. On the other hand, functional outcome in euthymic patients was related to verbal fluency, even after controlling for residual depressive symptoms. **CONCLUSIONS:** Neuropsychological performance was similar in both groups, except for verbal fluency, which was lower in the depressed group. Poor verbal fluency was related to a poor social outcome in euthymic patients. Further research including longitudinal designs aimed at evaluating changes in cognition in these patients is warranted.

Mataix-Cols D, Alonso P, Pifarre J, Menchon JM, Vallejo J.

Psychiatry Res 2002 Apr 15;109(3):255-64

Neuropsychological performance in medicated vs. unmedicated patients with obsessive-compulsive disorder.

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To date, there have been no formal investigations of neuropsychological performance in patients with obsessive-compulsive disorder (OCD) taking psychotropic medications. The purpose of this study was to determine whether medicated and unmedicated patients with OCD demonstrate differences in neuropsychological functioning. Fifty-two patients with a primary DSM-IV diagnosis of OCD participated in the study; 28 were taking serotonin reuptake inhibitors (SRIs), and 24 were treatment-naïve (n=8) or had finished a washout period prior to their inclusion in other studies (n=16). The groups were well matched with regard to demographic and clinical variables, including symptom severity. Each group was administered a comprehensive neuropsychological battery declarative and procedural learning, visuo-constructive skills, and executive functions. SRI-medicated did not differ from SRI-free patients on any neuropsychological measure. Benzodiazepines seemed to improve the patients' functioning on a semantic verbal fluency test. In addition, there were significant interactions between SRIs and benzodiazepines on the perseverative errors of the Wisconsin Card Sorting Test and on reaction times. SRI-medicated patients with OCD are able to perform on cognitive functioning tests at a comparable level with that of SRI-free patients, and these results have positive implications for OCD patients who respond to SRIs. The interactions between SRIs and benzodiazepines and their effect on cognition in OCD are likely to be complex and deserve further study.

Pintor L, Torres X, Navarro V, Gastó C.

[Major depressive episode: a study of remission and relapses]

Med Clin (Barc) 2002 Jan 26;118(2):41-6

[Article in Spanish]

Servicio de Psiquiatria, Instituto Clínico de Psiquiatria y Psicología, Hospital Clínico y Provincial de Barcelona p@comb.es

BACKGROUND: Our objective was to study the rates of remission and relapse over more than two years in a sample of Spanish outpatients with DSM-III-R criteria of unipolar major depressive episodes. **PATIENTS AND METHODS:** In the first assessment, we used the structured clinical interview for DSM-III-R (SCID). Forthcoming visits were held monthly. A survival analysis was used to assess partial and complete remission in the original sample of 356 patients. The probability and predictability and prediction of relapses were calculated in 186 patients who finished the 2 year follow-up period. Evolution stages were recorded using the Hamilton Depression Rating Scale (HDRS), after applying the Frank criteria. Patients were treated following standardized pharmacological protocols at our center. **RESULTS:** After 6 months of follow-up, 50% of patients had attained a complete remission; it was partial in 25% of cases. Rate of relapses for patients on complete remission was 12,18%, whereas it was 67,61% for patients on partial remission. Risk of relapses was 2,84 times greater after partial remission than after complete remission. Partial remission was the most powerful predictor of relapses. **CONCLUSIONS:** Partial remission after a depressive episode seems to be an important predictor of relapses.

Prieto JM, Blanch J, Atala J, Carreras E, Rovira M, Cirera E, Gasto C.

Psychiatric morbidity and impact on hospital length of stay among hematologic cancer patients receiving stem-cell transplantation.

J Clin Oncol 2002 Apr 1;20(7):1907-17

Department of Psychiatry, Clinical Institute of Psychiatry and Psychology and Stem-Cell Transplantation Unit, University of Barcelona, Barcelona, Spain.jmprieto@comg.es

PURPOSE: To determine the prevalence of psychiatric disorders during hospitalization for hematopoietic stem-cell transplantation (SCT) and to estimate their impact on hospital length of stay (LOS). **PATIENTS AND METHODS:** In a prospective inpatient study conducted from July 1994 to August 1997, 220 patients aged 16 to 65 years received SCT for hematologic cancer at a single institution. Patients received a psychiatric assessment at hospital admission and weekly during hospitalization until discharge or death, yielding a total of 1,062 psychiatric interviews performed. Psychiatric disorders were determined on the basis of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Univariate and multivariate linear regression analyses were used to identify variables associated with LOS. **RESULTS:** Overall psychiatric disorder prevalence was 44.1%; an adjustment disorder was diagnosed in 22.7% of patients, mood disorder in 14.1%, an anxiety disorder in 8.2%, and delirium in 7.3%. After adjusting for admission and in-hospital risk factors, diagnosis of any mood, anxiety, or adjustment disorder ($P = .022$), chronic myelogenous leukemia ($P = .003$), Karnofsky performance score less than 90 at hospital admission ($P = .025$), and higher regimen-related toxicity ($P < .001$) were associated with a longer LOS. Acute lymphoblastic leukemia ($P = .009$), non-Hodgkin's lymphoma ($P = .04$), use of peripheral-blood stem cells ($P < .001$), second year of study ($P < .001$), and third year of study ($P < .001$) were associated with a shorter LOS. **CONCLUSION:** Our data indicate high psychiatric morbidity and an association with longer LOS, underscoring the need for early recognition and effective treatment.

Pujol J, Lopez A, Deus J, Cardoner N, Vallejo J, Capdevila A, Paus T.

Anatomical variability of the anterior cingulate gyrus and basic dimensions of human personality.

Neuroimage 2002 Apr;15(4):847-55

Magnetic Resonance Center of Pedralbes, 08950 Barcelona, Spain.

This study focused on investigating a possible relationship between interindividual variability in the morphology of the cingulate gyrus and behavioral styles. Using magnetic resonance images obtained from 100 healthy young volunteers (50 women and 50 men), we measured the surface area of the anterior cingulate gyrus and related it to the scores on the Temperament and Character Inventory. Anatomical data revealed that hemispheric asymmetry in the anterior cingulate gyrus surface area was very common (83% of cases) and that a prominent right anterior cingulate was more frequent in women than in men. In the correlational analysis, surface measurements of the right anterior cingulate gyrus accounted for a 24% score variance in Harm Avoidance. Both women and men with larger right anterior cingulate described themselves as experiencing greater worry about possible problems, fearfulness in the face of uncertainty, shyness with strangers, and fatigability. Furthermore, women reported overall higher scores in Harm Avoidance than men; these gender differences were largely explained by gender differences in the right anterior cingulate area in a covariate analysis. Our observations suggest that a large right anterior cingulate is related to a temperamental disposition to fear and anticipatory worry in both genders and that a higher prevalence of these traits in women may be coupled with a greater expansion of this brain region.

Pujol J, Cardoner N, Benlloch L, Urretavizcaya M, Deus J, Losilla JM, Capdevila A, Vallejo J.

CSF spaces of the Sylvian fissure region in severe melancholic depression
Neuroimage 2002 Jan;15(1):103-6

Magnetic Resonance Center of Pedralbes, 08950 Barcelona, Spain.

The Sylvian fissure region gathers lateral frontotemporal cortices and subcortical structures that are frequently disturbed in patients with mood disorders. We have investigated possible CSF space changes in this brain region in severe melancholic depression. Fifty-seven patients and 37 control subjects received three-dimensional MRI. CSF volumes were obtained for cerebral CSF, lateral ventricles, and both Sylvian fissure regions. As a group, patients showed a significant CSF space enlargement that was prominent around the Sylvian fissure, particularly in the left hemisphere. Likewise, evident leftward asymmetry was more frequent in the patient group (patients 31.6%, controls 2.7%). The combination of CSF space enlargement and the pattern of Sylvian CSF asymmetry predicted the patient condition with 62.2% specificity and 82.5% sensitivity. We conclude that, in the context of a broad severity spectrum of imaging alterations in severe melancholic depression, asymmetrical CSF space enlargement may be evident in the Sylvian fissure region.

Rosel P, Arranz B, Urretavizcaya M, Oros M, San L, Vallejo J, Navarro MA.

Different distributions of the 5-HT reuptake complex and the postsynaptic 5-HT(2A) receptors in Brodmann areas and brain hemispheres.

Psychiatry Res 2002 Aug 30;111(2-3):105-15

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The aim of the present study was to determine the distribution of the resynaptic 5-HT reuptake complex and the 5-HT(2A) receptors through Brodmann areas from two control subjects, together with the possible existence of laterality between both brain hemispheres. A left laterality was observed in the postsynaptic 5-HT(2A) binding sites, with significantly higher B(max) values in the left frontal and cingulate cortex. In frontal cortex, [3H]imipramine and [3H]paroxetine binding showed the highest B(max) values in areas 25, 10 and 11. In cingulate cortex, the highest [3H]imipramine and [3H]paroxetine B(max) values were noted in Brodmann area 33 followed by area 24, while postsynaptic 5-HT(2A) receptors were mainly distributed through Brodmann areas 23 and 29. In temporal cortex, the highest [3H]imipramine and [3H]paroxetine B(max) was noted in Brodmann areas 28 and 34, followed by areas 35 and 38. All Brodmann areas from parietal cortex (1, 2, 3, 4, 5, 6, 7, 39, 40 and 43) showed similar presynaptic and postsynaptic binding values. In occipital cortex no differences were observed with regard to the brain hemisphere or to the Brodmann area (17, 18 and 19). These results suggest the need to carefully define the brain hemisphere and the Brodmann areas studied, as well to avoid comparisons between studies including different Brodmann areas or brain hemispheres.

Vallejo J, Rosel P, Arranz B, Urretavizcaya M, Menchon JM, Contreras F, Navarro A. Loss of the circadian variation of platelet [3H]imipramine binding in delusional compared with non-delusional endogenously depressed patients. *J Affect Disord* 2002 Oct;72(1):95-101

Department of Psychiatry, CSU Bellvitge, Barcelona, Spain.

BACKGROUND: The circadian variations of the serotonin reuptake sites were studied in 16 patients meeting DSM-IV criteria for major depression with melancholia, either with (n=8) or without (n=8) psychotic symptomatology. **METHOD:** The [3H]imipramine binding sites were measured in platelet samples. **RESULTS:** While no statistically significant difference was found between the morning (09:00 h) and evening (21:00 h) [3H]imipramine B(max) values in the control group, both the non-delusional and delusional melancholic patients showed higher evening than morning B(max) values, which were only statistically significant in the former. When both diagnostic groups were compared, the delusional patients showed significantly lower [3H]imipramine binding values than the non-delusional patients both in the morning and evening samples. Within the non-delusional depressed patients, those individuals with mood circadian variation, assessed by the 18th item of the HDRS, showed significantly lower B(max) values than those without mood variation. Lowest morning and evening B(max) values were noted in the delusional depressed group without mood variations. **CONCLUSIONS:** These results suggest that delusional depressions might have a different neurobiological substrate with loss of chronobiological rhythms.

7.2. Subunitat de Psicobiologia

Adan A, Natale V.

Gender differences in morningness-eveningness preference.

Chronobiol Int 2002 Jul;19(4):709-20

Department of Psychiatry and Clinical Psychobiology, University of Barcelona, Spain.

Morningness-eveningness preference (morning-, intermediate-, evening-type) or circadian typology is the individual difference that most clearly explains the variations in the rhythmic expression of biological or behavioral patterns. The aim of this study was to analyze gender difference in morningness-eveningness preference using the Horne and Ostberg questionnaire in the largest university student population selected so far (N = 2135), with an age range 18-30 yr. Morningness-eveningness questionnaire (MEQ) score distribution closely correlated to the normal curve (range 17-78, mean = 48.25; SD = 10.11), with 338 (15.84%) morning-types, 1273 (59.62%) intermediate-types, and 524 (24.54%) evening-types. The men and women differed significantly in their mean scores ($p < 0.0001$) and distribution per circadian typology ($p < 0.00001$), with the men presenting a more pronounced eveningness preference. Three factors were identified by factor analysis: time of greatest efficiency (I), sleep time/sleep phase (II), awakening time/sleep inertia (III). The MEQ items sensitive to gender differences were essentially those included in factor I and factor II. The results are discussed in relation to recent models of circadian regulation of the sleep-wake cycle.

Bartres-Faz D, Junque C, Serra-Grabulosa JM, Lopez-Alomar A, Moya A, Bargallo N, Mercader JM, Moral P, Clemente IC.

Dopamine DRD2 Taq I polymorphism associates with caudate nucleus volume and cognitive performance in memory impaired subjects.

Neuroreport 2002 Jul 2;13(9):1121-5

Departament de Psiquiatria i Psicobiologia Clínica, IDIBAPS, Spain.

We studied the relationship among dopamine receptor D2 (DRD2) Taq I genetic polymorphism, caudate nucleus volumetry as measured using MRI and neuropsychological functions in 49 memory impaired older people. Compared with DRD2 A1 carriers, subjects homozygous for the DRD2 A2 allele performed poorer in a measure of general cognitive functioning (MMSE) and in long term verbal memory, and presented reduced left caudate nucleus volumes. Caudate nucleus atrophy correlated with cognitive measures influenced by the genetic polymorphism and with visual memory performance. Our findings suggest that among the aged with cognitive impairments, the homozygous status for the A2 allele of the DRD2 Taq I polymorphism is associated with diminished cognitive performance and increased atrophy in the striatum.

Bartres-Faz D, Junque C, Clemente IC, Lopez-Alomar A, Bargallo N, Mercader JM, Moral P.

Relationship among (1)H-magnetic resonance spectroscopy, brain volumetry and genetic polymorphisms in humans with memory impairment
Neurosci Lett 2002 Jul 26;327(3):177-80

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We investigated the relationship among neuroanatomical, neurochemical and genetic variables in 44 subjects with age-related memory impairment. Hydrogen magnetic resonance spectroscopy was used to determine N-acetyl/creatine (NAA/Cr) concentrations in basal ganglia and medial temporal regions. Volumetric measures were obtained for caudate nucleus and hippocampus. Genetic polymorphisms examined included apolipoproteins (APO) E and CII, angiotensin converting enzyme and dopamine D2 receptor TaqI genes. Age was found to be negatively correlated with hippocampal and basal ganglia volumes, but not with neurochemical values. Multiple regression analyses showed that the APOC1 polymorphism was the only variable which predicted NAA/Cr values in basal ganglia. NAA/Cr metabolites in the medial temporal lobe but not in the basal ganglia region were related with lower performance in verbal memory.

Bartres-Faz D, Clemente IC, Monras M, Munoz M, Lopez-Alomar A, Valveny N, Moral P, Gual A, Sanchez-Turet M, Guardia J, Junque C.

Relation of Apo E and ACE genes to cognitive performance in chronic alcoholic patients
Addict Biol 2002 Apr;7(2):227-33

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Apolipoprotein E epsilon4 and ACE genes have been related to several conditions involving cognitive impairment, including Alzheimer's disease, normal ageing and cerebrovascular disease. However, it has not been established whether their genotypes are associated with alcoholism or its cognitive functioning. Genotypic distributions of 140 chronic alcoholic patients were compared with a non-alcoholic sample, and the cognitive performance of a subsample of the alcoholic subjects was assessed with standard neuropsychological tests. No differences in allele or genotype distributions of Apo E or ACE genes were found when comparing controls and alcoholics (Apo E epsilon2/2; patients 1.4%, controls 0% $p < 0.06$; epsilon2/epsilon3; patients 9.3%, controls 6.6% $p < 0.29$; epsilon2/epsilon4; patients 0%, controls 1% $p < 0.31$; epsilon3/epsilon3 patients 71.4%, controls 72% $p < 0.89$; epsilon3/epsilon4; patients 15.7%, controls 19.2%, $p < 0.36$; epsilon4/epsilon4; patients 2.1%, controls 1.2% $p < 0.44$; ACE D/D; patients 35%, controls 28.5% $p < 0.14$; I/D; patients 47.5%, controls 51.1% $p < 0.51$; I/I; patients 14.5%, controls 20.4% $p < 0.19$). In terms of cognitive performance, epsilon4/epsilon3 patients did better on visuoconstructive ($p < 0.001$) and visual memory ($p < 0.04$) functions compared with epsilon2/epsilon3 bearers. Furthermore, ACE D/D patients performed better on a test of abstract reasoning ($p < 0.03$) compared with the ACE I/I homozygous group. The cognitive results suggest that Apo E or ACE genotypes may modify the effects of ethanol on cognitive deterioration in alcoholic patients. However, the data do not support an association between the Apo E epsilon4 allele and reduced cognitive performance in alcoholism.

Bartres-Faz D, Junque C, Moral P, Lopez-Alomar A, Sanchez-Aldeguer J, Clemente IC. Apolipoprotein E gender effects on cognitive performance in age-associated memory impairment.

J Neuropsychiatry Clin Neurosci 2002 Winter;14(1):80-3

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Among 100 individuals with age-associated memory impairment (AAMI), APOE E4 carriers performed worse on memory. However, when subjects were considered by gender, this effect was only observed in females. APOE E4 may have a more robust cognitive influence on female than on male individuals with AAMI.

Brugal MT, Barrio G, De LF, Regidor E, Royuela L, Suelves JM.

Factors associated with non-fatal heroin overdose: assessing the effect of frequency and route of heroin administration

Addiction 2002 Mar;97(3):319-27

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AIMS: To examine risk factors associated with non-fatal heroin overdose, particularly frequency and route of heroin administration. DESIGN: Data from cross-sectional surveys were analysed as a case-control and as a case cross-over design. SETTING AND PARTICIPANTS: 2556 subjects treated for heroin dependence in 164 outpatient facilities in Spain. MEASUREMENTS: Prevalence of overdose involving emergency care in the 12 months before treatment admission. CASE CONTROL DESIGN: Odds ratio (OR) adjusted by logistic regression. CASE-CROSSOVER DESIGN: Estimated relative risk (RR) of transient risk of injecting heroin. FINDINGS: The prevalence of overdose was 10%. In the case control analysis the cumulative risk of overdose increased as the frequency of heroin use decreased. However, among daily heroin users this risk increased as the frequency of heroin injection rose, with an OR of 6.0 (95% CI: 3.9-9.6) for daily injectors versus non-injectors. Sniffers had a higher risk than smokers among non-daily users, but not among daily users. Other factors associated with increased risk of overdose were: tranquilizers, alcohol or cocaine use, living in certain regions and being long-term HIV+ 0. In the case-crossover analysis, the RR for injecting heroin versus using other routes immediately before overdose was 15.9 (95% CI: 9.5-26.6), and was much higher for non-daily heroin users than for daily users. CONCLUSIONS: These findings suggest that the rapid entry of a large quantity of heroin into the blood (as occurs when injecting) involves a high risk of overdose, especially when the heroin tolerance level is low (as occurs in sporadic users).

Darbra S, Prat G, Pallares M, Ferre N.

Tolerance and sensitization to the hypnotic effects of alcohol induced by chronic voluntary alcohol intake in rats.

J Psychopharmacol 2002 Mar;16(1):79-83

Departament de Psicobiologia i Metodologia en Ciències de la Salut, Universitat Autònoma de Barcelona, Spain.

The effect of a chronic alcohol exposure on the development of tolerance to the depressive effects of alcohol were examined in male Wistar rats that voluntarily self-administered alcohol. A free-choice drinking procedure based on the limited access paradigm and the addition of glucose that implies an early availability of the alcoholic solution was used (Alcoholism Primary Praecox procedure). Alcohol-induced sleep time (3.5 g alcohol per kg i.p.) was measured at 90 days (after 2 months of alcohol consumption) or at 60 + 90 days old (1 or 2 months of alcohol consumption). The psychomotor performance was also evaluated by means of an 80 degrees inclined screen test. Subjects that had been tested for the hypnotic effects at both 60 and 90 days showed a higher intake of alcoholic solution than the animals only tested at 90 days. The same consumption increase was observed in the glucose group. No significant differences between groups were observed in the inclined screen test. Tolerance to the hypnotic effects of alcohol was observed at 90 days. On the other hand, no significant differences between alcohol and control groups (glucose or water) were observed in the sleep time at 60 days. In the alcohol-drinking rats tested for two trials (60 and 90 days), sensitization instead of tolerance to the second hypnotic alcohol injection was seen. Tolerance to the hypnotic effects of alcohol observed after chronic voluntary alcohol consumption may provide animal models of alcoholism based on limited access to sweetened alcoholic solutions with construct validity.

Escera C, Corral MJ, Yago E.

An electrophysiological and behavioral investigation of involuntary attention towards auditory frequency, duration and intensity changes.

Brain Res Cogn Brain Res 2002 Nov;14(3):325-32

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We measured behavior and event-related brain potentials (ERPs) in 12 subjects performing on an audio-visual distraction paradigm to investigate the cerebral mechanisms of involuntary attention towards stimulus changes in the acoustic environment. Subjects classified odd/even numbers presented on a computer screen 300 ms after the occurrence of a task-irrelevant auditory stimulus, by pressing the corresponding response button. Auditory stimuli were standard tones (600 Hz, 200 ms, 85 dB; $P=0.8$) or deviant tones ($P=0.2$), these differing from the standard either in frequency (700 Hz), duration (50 ms) or intensity (79 dB), in separate blocks. In comparison to performance to visual stimuli following the standard tones, reaction time increased by 24 ms ($F(1,11)=10.91$, $P<0.01$) and hit rate decreased by 4.6% ($F(1,11)=35.47$, $P<0.001$) to visual stimuli following the deviant tones, indicating behavioral distraction. ERPs revealed the mismatch negativity (MMN) elicited to deviant tones, which was larger for the duration deviant than for the frequency and intensity deviants ($F(2,22)=19.43$, $P<0.001$, epsilon =0.83), and which had different scalp distribution for all three deviant conditions ($F(16,176)=2.40$, $P<0.05$, epsilon =0.12). As the shorter duration and softer intensity deviant tones were unlikely to engage fresh neurons responding to their specific physical features, the present results indicate that a genuine change detection mechanism is involved in triggering attention switching towards sound changes, and suggest a largely distributed neural network of the auditory cortex underlying such involuntary attention switching.

Gorwood P, Ades J, Bellodi L, Cellini E, Collier DA, Di Bella D, Di Bernardo M, Estivill X, Fernandez-Aranda F, Gratacos M, Hebebrand J, Hinney A, Hu X, Karwautz A, Kipman A, Mouren-Simeoni MC, Nacmias B, Ribases M, Remschmidt H, Ricca V, Rotella CM, Sorbi S, Treasure J; EC Framework V 'Factors in Healthy Eating' consortium.

The 5-HT(2A) -1438G/A polymorphism in anorexia nervosa: a combined analysis of 316 trios from six European centres.

Mol Psychiatry 2002;7(1):90-4

CHU Louis Mourier, Assistance-Publique des Hopitiaux de Paris, 178, rue des Renouillers 92701 Colombes cedex, France. philip.gorwood@lmr.ap-hop-paris.fr Multicenter Study

Several case-control association studies have raised the possibility that the A allele of a -1438 G/A polymorphism in the type 2A serotonin receptor (HTR2A) gene may be a risk factor for anorexia nervosa. However the absence of linkage and the existence of negative association studies raise the possibility of false positive findings, resulting from population stratification or lack of statistical power. To address this controversy we recruited a sample of 316 patients with anorexia nervosa from six European centres, and utilised a family-based transmission disequilibrium (TDT) approach to analyse the HTR2A-1438 G/A polymorphism. Age at onset and minimal BMI were also taken into consideration in order to detect clinical heterogeneity or a quantitative trait effect. The TDT approach showed that the A allele was transmitted 133 times and not transmitted 148 times (McNemar $\chi^2(2) = 0.29$, $df = 1$, $P = 0.59$). Also, the haplotype-based haplotype relative risk method showed no evidence for association of the A allele, in samples from each centre ($\chi^2(2) < 2.15$, $df = 1$, $P > 0.14$) and in the total sample ($\chi^2(2) = 0.55$, $df = 1$; $P = 0.46$). Furthermore, we found no evidence for heterogeneity of the A allele frequency between samples ($\chi^2(2) = 2.54$, $df = 4$, $P = 0.64$), either according to minimal-BMI ($F_{1/242} = 2.14$, $P = 0.45$) or age at onset ($F_{1/224} = 2.39$; $P = 0.12$). QTL-TDT analyses also showed no direct role of the A allele on these traits. We thus found no evidence for a significant role of the 5-HT(2A) gene in anorexia nervosa. Previous results may have been exposed to stratification bias (which we controlled by the TDT method) and/or the risk of type 1 error (from which we were less exposed because of the sample size).

Maneru,-Cristina; Junque,-Carme; Botet,-Francesc; Tallada,-Mercede; Segarra,-Dolors; Narberhaus,-Ana

Memoria declarativa y procedimental en adolescentes con antecedentes de asfíxia perinatal. / Declarative and procedural memory in adolescents with antecedents of perinatal asphyxia.

Psicothema. 2002 May; Vol 14(2): 463-468

U de Barcelona, Depto. Psiquiatria y Psicobiologia Clinica, Barcelona, Spain, 08036, cjunque@psi.ub.es

Neuropathological studies of the cerebral consequences of perinatal asphyxia have shown the hippocampal and basal ganglia to be particularly vulnerable to injury. It has been suggested that neuroanatomical lesions of this kind may produce declarative and procedural memory deficits. To test this hypothesis we compared memory performance in 28 adolescents with antecedents of perinatal asphyxia and 28 controls matched for age, sex and sociocultural status. Results showed impairment in verbal and visual declarative memory in subjects with antecedents of moderate neonatal encephalopathy but not in subjects with mild encephalopathy. Procedural memory performance was similar in all groups. The results suggest that the hippocampal system is more vulnerable to perinatal asphyxia than the striatal system.

Mones J, Adan A, Segu JL, Lopez JS, Artes M, Guerrero T.

Quality of life in functional dyspepsia.

Dig Dis Sci 2002 Jan;47(1):20-6

Department of Gastroenterology, Hospital de la Santa Creu i Sant Pau, Universidad Autonoma de Barcelona, Spain.

Our purpose was to assess the quality of life of functional dyspepsia patients using the SF-36 generic scale and the Gastrointestinal Symptoms Rating Scale (GSRS). In all, 328 dyspeptic patients were included in a multicenter, prospective, observational study. Both scales were filled out at baseline and one and three months after a prokinetic agent was given as a single-drug therapy. A total of 250 patients completed the study. An improvement in all SF-36 dimensions was observed, although the final scores were lower than the population reference values. Physical role (27% change), emotional role (20%), and physical pain (16%) dimensions showed the greater change. The GSRS total and domain scores also showed significant decreases. The best predictors of quality of life improvement were certain basal symptoms, drug compliance, and the absence of idiopathic dyspepsia. In conclusion, both the generic and the specific scales provide useful and sensitive measures of quality of life in functional dyspepsia patients on single-drug treatment.

Natale V, Adan A, Chotai J.

Further Results on the Association between Morningness-Eveningness Preference and the Season of Birth in Human Adults.

Neuropsychobiology 2002;46(4):209-14

Department of Psychology, University of Bologna, Bologna, Italy.

Morningness-eveningness preference by the self-rated Morningness-Eveningness Questionnaire (MEQ) has earlier been shown to be associated with the subjects' ease of birth. Here, we obtain this result for a new sample of 2,125 university students and for the sample obtained by pooling the data with the earlier study, yielding totally 3,709 Italian and Spanish subjects. An nonlinear regression of MEQ as a cosine curve according to the month of birth, adjusting for age and gender, gave a maximum (morningness) around the transition between the birth months December and January, and a minimum (eveningness) around the transition between the birth months June and July. Multiple logistic regressions showed that for females as well as for males, the group born during the half-year April to September containing summer had a significantly lower proportion of morning types as compared with the group born during the half-year October to March containing winter. This was more pronounced for males. Moreover, a significantly higher proportion of morning types among females compared with males was found only in the group born during April to September, but not in the group born during October to March. There was a weak but statistically significant positive correlation between MEQ and age in the sample's limited age range of 17-30 years. We discuss the results in terms of the mutually inhibitory systems of melatonin and dopamine, and find further support for a hypothesis that it is the variation in the length of photoperiod during the gestational or perinatal period that contributes significantly to the season of birth variation found in the morningness-eveningness preference among adults.

Poca MA, Sahuquillo J, Busto M, Rovira A, Capellades J, Mataro M, Rubio E.

Agreement between CSF flow dynamics in MRI and ICP monitoring in the diagnosis of normal pressure hydrocephalus. Sensitivity and specificity of CSF dynamics to predict outcome.

Acta Neurochir Suppl 2002;81:7-10

Department of Neurosurgery, Vall d'Hebron University Hospitals, Barcelona, Spain.

OBJECTIVES: The aims of the study were 1) to assess the degree of agreement between CSF flow dynamics determined by MR and ICP monitoring in the diagnosis of NPH, and 2) to determine the sensitivity and specificity of CSF flow dynamics studied by MR in predicting improvement after shunting. **PATIENTS AND METHODS:** A prospective study was carried out in 35 consecutive patients with suspected NPH. CSF velocity (Phase Contrast) through the aqueduct was determined in sagittal plane. Patients were classified as "normal" or hyperdynamic in comparison with a control group of 27 healthy volunteers. Continuous extradural ICP monitoring was performed for at least 72 hours and patients were classified as having active, compensated, or ex-vacuo hydrocephalus. Patients with active or compensated hydrocephalus were shunted. **RESULTS:** The degree of agreement between MR dynamics and ICP monitoring was 82%. Sensitivity of CSF velocity was 90% and specificity was 50%. **CONCLUSIONS:** The degree of agreement between ICP monitoring and CSF velocity is high. High CSF velocity through the aqueduct is a good predictor of improvement after surgery. However, patients with normal velocity in MR required additional tests before a diagnosis of NPH is ruled out.

Polo MD, Newton P, Rogers D, Escera C, Butler S.
ERPs and behavioural indices of long-term preattentive and attentive deficits after closed head injury.
Neuropsychologia 2002;40(13):2350-9

Burden Neurological Institute, Frenchay Hospital, BS16 1JB, Bristol, UK.dolorespolo@hotmail.com

Attentional deficits are often reported even years after sustaining a closed head injury (CHI). Disturbance of cognitive attentional functions following CHI has been documented in both behavioural and event-related brain potential (ERP) studies. Recently, the possibility that the sequelae of CHI extend to preattentive processes of attention has been pointed out. We used a paradigm that makes it possible to assess simultaneously the processing of relevant information and involuntary mechanisms of attention to gain further insight in this matter. Eleven patients with CHI greater than 1 year post-trauma and 14 age-matched control subjects were engaged in the performance of a continuous visual reaction time (RT) discrimination task while ignoring streams of auditory task-irrelevant stimuli. The main characteristic in the paradigm was that all visual stimuli were shortly preceded by an auditory stimulus, which could be a repeated (90%) or a different (deviant) tone. We measured performance on the discrimination task, and ERP indices of preattentive (mismatch negativity MMN) and attentive information processing (P1, N165, P3b). In relation to control subjects, CHI patients showed an attenuation of the MMN evoked by the deviant-tone. In response to the visual stimuli, CHI patients showed a delay of P1, and a reduction of the N165 and P3b components. Moreover, they had slower RT and missed more responses in a visual discrimination task. These results indicate both preattentive and attentive deficits, which is consistent with the typical diffuse axonal injury (DAI) resulting after CHI.

Salgado-Pineda P, Vendrell P, Bargallo N, Falcon C, Junque C.

[Functional magnetic resonance in the evaluation of the activity of the anterior cingulate cortex using Stroop's paradigm]

Rev Neurol 2002 Apr 1-15;34(7):607-11

[Article in Spanish]

Departament de Psiquiatria i Psicobiologia Clinica, Universitat de Barcelona, Institut d'Investigacions Biomediques (IDIBAPS), Barcelona, Espana.

INTRODUCTION. Stroop's paradigm has been used to evaluate the anterior attention system which regulates the inhibitory capacity of automatic responses. Functional neuroimaging techniques have shown a preponderant role for the anterior cingulate cortex in carrying out this paradigm. **OBJECTIVE.** To evaluate the activity of the anterior cingulate cortex in view of its clinical importance in the study of neurological and psychiatric disorders. **PATIENTS AND METHODS.** Eleven healthy volunteers took part in the study. The functional images were analyzed using the software SPM99 and by second order individual and group analysis. **RESULTS.** Initial local analysis showed activation in the right anterior cingulate cortex (Brodmann's area 32) and left central (areas 31 and 23); caudate nucleus (right body and left tail) and thalamus (bilateral). Overall there was significant activation of the left hemisphere, in areas 44 (Broca's area), 7, 40 (supra marginal gyrus and insular cortex, and in the right hemisphere in area 19. In spite of this there was great individual variation. **CONCLUSIONS.** The overall results are concordant with complex functional connections for attention and the control of automatic responses. In our study the anterior cingulate cortex was not selectively activated. The activation of the thalamus and caudate nucleus may be explained by their involvement in the frontostriatal circuits. The lack of individual consistency may be due to different personal cognitive styles of resolving conflicts. According to our results, Stroop's paradigm would not be clinically useful for showing good or bad functioning of the anterior cingulate cortex.

Serra Grabulosa JM, Sanchez Turet M, Grau C, Escera C.

[The potential P300 in the evaluation of the side effects of dexchlorpheniramine]

Rev Neurol 2002 Aug 16;35(4):306-10

[Article in Spanish]

Universitat de Barcelona, Barcelona, España.

INTRODUCTION. The antihistamine chlorpheniramine presents multiple adverse side effects on the central nervous system. In earlier work it has been observed that a dose equal to the one used in this study alters the evoked potentials PN (processing negativity) and MMN (mismatch negativity), which are, respectively, indicators of selective attention and of an automatic mechanism for detecting changes in auditory stimulation. **AIMS.** The aim of the present study was to evaluate the effects of a single 4 mg dose of dexchlorpheniramine on the evoked potential P300, to enable us to better define its effects on the central nervous system. **Subjects and methods.** Using the double blind procedure, half a sample consisting in 20 subjects was administered 4 mg of dexchlorpheniramine and the other 10 received placebo. 150 minutes after ingestion the potential P300 was recorded using an active oddball paradigm. Likewise, efficiency in detecting target stimuli was also evaluated. **results.** **RESULTS** show that a single 4 mg dose of dexchlorpheniramine does not alter P300 nor efficiency in detecting target stimuli. **CONCLUSIONS.** Results show that the dose used has no effect on voluntary processes involving the categorization of target stimuli nor on their detection. However, the alteration of other attentional mechanisms observed in previous work using the same doses suggests that it would be advisable to employ different evoked potential paradigms in the evaluation of the side effects other active principles or psychoactive substances have on auditory attention.

Summerfield C, Gomez-Anson B, Tolosa E, Mercader JM, Marti MJ, Pastor P, Junque C.

Dementia in Parkinson disease: a proton magnetic resonance spectroscopy study.

Arch Neurol 2002 Sep;59(9):1415-20

Department of Psychiatry and Clinical Psychobiology, ICMSN, Hospital Clinic, Casanova 143, 08036 Barcelona, Spain.

BACKGROUND: Magnetic resonance spectroscopy has been shown to be useful in differentiating idiopathic Parkinson disease (PD) from atypical parkinsonian syndromes such as progressive supranuclear palsy, multiple system atrophy, and corticobasal degeneration. **OBJECTIVE:** To systematically investigate the utility of proton magnetic resonance spectroscopy in distinguishing between idiopathic PD with dementia (PDD) and without dementia. **DESIGN:** Group comparisons and correlations of brain metabolites with clinical and neuropsychological variables. **PATIENTS AND METHODS:** Metabolite concentrations were acquired from voxels localized to the basal ganglia and occipital cortex in 14 patients diagnosed as having idiopathic PDD, 12 patients with PD without dementia, and 13 matched control subjects. The 3 groups underwent clinical and neuropsychological assessment. **RESULTS:** In the occipital region, N-acetylaspartate levels were significantly reduced in the PDD group relative to the PD and control groups. N-acetylaspartate values correlated with neuropsychological performance but not with severity of motor impairment. **CONCLUSIONS:** N-acetylaspartate reduction in occipital lobes may be a marker for dementia in PD. The distribution of metabolite reduction differs from that reported in Alzheimer disease. These findings suggest that proton spectroscopy may serve as a metabolic marker of cognitive disturbance in patients with PD.

Revisions

Maneru C, Junque C.

[Cognitive deficit in perinatal asphyxia]

Rev Neurol 2002 Jun 16-30;34(12):1171-7

[Article in Spanish]

Departamento de Psiquiatria y Psicobiologia Clinica, Universidad de Barcelona, Barcelona, Espana.

INTRODUCTION: During the period 1950 1970 the relation between perinatal asphyxia and cognitive alterations was studied. More recently the neuropsychological approach has been introduced to detect more subtle defects. **DEVELOPMENT:** With regard to intelligence, alterations in the intelligence quotient resulting from anoxia are more commonly seen in young children than in adolescents, probably because of compensation mechanisms. It is widely accepted that severe asphyxia causes motor and cognitive alterations and leads to cerebral palsy, epilepsy and intellectual retardation. The effects of mild or moderate asphyxia are still controversial. **CONCLUSION:** Thorough neuropsychological examination, particularly assessment of memory and frontal function, helps to identify subtle deficits which may explain some learning problems observed in children who have a history of moderate asphyxia but previously no clear neurological diagnosis.

Portella MJ, Marcos T.

[Frontal lobe involvement in elderly major depression]

Rev Neurol 2002 Nov 1-15;35(9):891-4

[Article in Spanish]

Institut Clinic de Psiquiatria i Psicologia. Servei de Psicologia Clinica. Hospital Clinic i Provincial de Barcelona, Espana.

INTRODUCTION: It is acknowledged that major depression (MD) entails alterations in moods, physiological dysfunctions and cognitive dysfunctions. The neuropsychological profile of this mental disorder, however, is still unknown. Furthermore, in the nosological delimitation of depressive disorders there are different categories, which makes it still more difficult to establish the cognitive dysfunction of MD. Over the last few years, a great deal of effort has been aimed at establishing a neuropsychological profile of elderly major depression (EMD) as a distinct depressive disorder, since it also involves other variables such as the course and response to pharmacological treatment. **AIMS.** The objective of this study is to review the present state of the cognitive deficits in EMD and their possible neurobiological correlates. **METHOD:** From a search in the Medline database using the keywords elderly major depressive disorders , cognitive function , frontal lobes and prefrontal area , we selected studies that had been conducted over the last 10 years. **CONCLUSIONS:** Recent studies have found mnemonic deficits, together with an executive dysfunction in EMD. Bearing in mind the interactions between affection, motivation and cognitive function enables us to better understand the involvement of the fronto subcortical pathways in this disorder. Moreover, future research should centre on the pathways that connect the frontal lobes and, more specifically, those between the prefrontal dorsolateral area and practically the rest of the brain, since, from what can be observed in the findings obtained, the executive dysfunction could be due to a brain connection disorder

Pueyo-Benito R, Vendrell-Gomez P.

[Neuropsychology of cerebral palsy]

[Article in Spanish]

Rev Neurol. 2002 Jun 1-15;34(11):1080-7.

Departament de Psiquiatria i Psicobiologia Clínica, Universitat de Barcelona, Facultat de Psicologia, Barcelona, 08035, Espana. rpueyo@psi.ub.es

INTRODUCTION: Cognitive performance in cerebral palsy (CP) varies between being completely normal and severe mental retardation. This heterogeneity depends on several factors, including the type of paralysis and associated cerebral lesions. **DEVELOPMENT:** We review neuropsychological studies with reference to general cognitive performance and specific performance (language, memory, attention and visuospatial functions). We also consider studies relating neuroimaging and neuropsychology in the different types of CP.

CONCLUSIONS: Language is one of the best preserved functions studied in CP, apart from effects due to the lesion itself. Defects of articulation may affect understanding but not to any great extent. Immediate memory also seems to be relatively well preserved. In general no effects of lateralization are seen with regard to language or memory, although this may be seen when carrying out complex tasks or when involving attention and visuoconstructive tasks. The relatively few studies relating neuroimaging and neuropsychology are inconclusive regarding specific abilities.

Pueyo Benito R, Vendrell Gomez P, Bargallo Alabart N, Mercader Sobreques JM.

[Neuroimaging and cerebral palsy]

[Article in Spanish]

Rev Neurol. 2002 Sep 1;35(5):463-9.

Universitat de Barcelona. Facultat de Psicologia, Barcelona, Espana.

INTRODUCTION. A high percentage of subjects with cerebral palsy (CP) present brain injuries, which are revealed by neuroimaging techniques. On the whole the pattern of brain damage is heterogeneous. **DEVELOPMENT.** We review the studies that have described the brain damage in CP using structural and functional neuroimaging techniques. Brain damage is considered according to the type of CP and taking the gestational age into account. **CONCLUSIONS.** According to structural neuroimaging studies carried out in spastic diplegia, the brain pattern differs with the gestational age. In early subjects with spastic diplegia it is the periventricular white matter that is mainly affected. In spastic quadriplegia, cortico subcortical lesions and hypoplasia of the corpus callosum are also observed. Unilateral lesions predominate in the case of hemiplegia. Hemiplegic subjects may also present damage to the white matter, cortico subcortical lesions and congenital brain malformations. In these subjects, some of the injury patterns observed seem to be related with the clinical features they display. Dyskinetic CP is characterised by the absence of lesions and alteration of the basal ganglia and the thalamus. Very few studies have been conducted that take the different types of CP into account in comparing the findings of structural and functional neuroimaging.

Sanchez Turet M, Serra Grabulosa JM.

Auditory evoked potentials and alcohol: characteristics of the Mismatch Negativity component in alcoholism

Rev Neurol 2002 Dec 1-15;35(11):1049-55

[Article in Spanish]

Universitat de Barcelona, Barcelona, España.

Aims. The aim of this work is to review the effects of alcohol on the MMN component, to discuss its viability as a vulnerability marker for alcoholism, and to link it with the P300 component. **Method.** Alcohol alters the P300 and MMN components of auditory evoked potentials. In alcoholism, the alterations observed in the P300 component in risk subjects have been seen as markers of susceptibility to development of the illness. In the case of the MMN component, on the other hand, to date its viability as a vulnerability marker has only been evaluated in three studies, with varying results. While two of them found no differences, in the third and most recent it was found that risk subjects presented an increase in the amplitude of the MMN, which was interpreted as a reflection of the cortical hyperexcitability suggested by other authors and which was also reflected in the decrease in the P300 amplitude. **Conclusions.** The results obtained do not enable us to draw conclusions about whether the MMN component is altered in risk subjects for alcoholism. The differences in the studies that have been conducted could be due to the variations in the characteristics of the samples used or of the evaluation of the characteristics of MMN. The analysis of previous work on P300 or MMN suggests that broader, more homogeneous samples should be used in future research and that, in addition to the MMN peak, its mean amplitude in successive intervals, together with its two subcomponents should also be evaluated separately.

Serra-Grabulosa JM, Sanchez-Turet M, Grau C.

[The secondary effects of the antihistamine chlorpheniramine on the central nervous system]

Rev Neurol 2002 Jun 16-30;34(12):1178-82

[Article in Spanish]

Laboratorio de Neuropsicología, Departamento de Psiquiatría y Psicobiología Clínica, Universidad de Barcelona, Barcelona, España. jserra@psi.ub.es

OBJECTIVE: The objective of this study is to review the main investigations into the secondary effects of the antihistamine chlorpheniramine on the central nervous system (CNS). **DEVELOPMENT:** The antagonists of the H1 receptors of histamine, usually used in the treatment of symptoms of allergy or the common cold, have many adverse effects on the CNS. They cause day time drowsiness, cause poorer performance of tasks involving visuo motor coordination and make it more difficult to detect target auditory stimuli in tasks involving sustained concentration. When using evoked potentials (EP) it has been observed that they alter the system for maintaining auditory attention. They cause increased P300 latency, an EP related to the voluntary ability to discriminate between relevant stimuli, a reduction in the amplitude of mismatch negativity (MMN), an EP which is seen as a pre attention mechanism for automatic detection of environmental acoustic changes and alters selective attention capacity, reflected by a reduction in the amplitude of processing negativity (PN). **CONCLUSIONS:** These studies show that chlorpheniramine has major adverse effects on the CNS, and the patient may not be subjectively aware of this (e.g. selective attention). This means that in certain situations it is a dangerous substance. The characteristics of these adverse effects should lead to a review of the prescription of chlorpheniramine, and stimulate the search for other substances with similar therapeutic actions but fewer side effects on the CNS

7.3. Publicacions conjuntes de les dues subunitats

Bussolotti D, Fernandez-Aranda F, Solano R, Jimenez-Murcia S, Turon V, Vallejo J.
Marital status and eating disorders. An analysis of its relevance.
J Psychosom Res 2002 Dec;53(6):1139-45

Department of Psychiatry, University Hospital of Modena, Modena, Italy

OBJECTIVES: This study attempts to understand the clinical impact of marital status on the psychopathology and symptomatology of anorexia (AN) and bulimia nervosa (BN) patients. METHOD: Eating disorder (ED) patients (n=332, 198 BN and 134 AN) consecutively admitted to our unit participated in the study. All subjects met DSM-IV criteria for those pathologies and were female. Our sample was divided retrospectively into three subgroups based on their marital status.

For the assessment, commonly applied questionnaires in the field of ED were used [Eating Attitudes Test (EAT-40), Eating Disorder Inventory (EDI), Bulimic Investigatory Test Edinburgh (BITE), Body Shape Questionnaire (BSQ), Beck Depression Inventory (BDI) and Social Avoidance and Distress Scale (SAD)]. RESULTS: 2x3 (DiagnosticxMarital status) ANOVA and ANCOVA (with age as covariance) designs were applied in the current study. Our results suggested that ED patients who lived with a partner were significantly different with respect to the other ED patients in the following variables: higher age ($P<.0001$), higher motivation for change ($P<.004$), perfectionism ($P<.03$) and purging behavior ($P<.04$). DISCUSSION: The main finding in this study is that ED

patients who live with a partner are those who presented greater eating symptomatology and psychopathology but even higher motivation for change. Interpersonal functionality has to be considered in the development and maintenance of ED.

Jurado MA, Junque C, Vallejo J, Salgado P, Grafman J.
Obsessive-compulsive disorder (OCD) patients are impaired in remembering temporal order and in judging their own performance.
J Clin Exp Neuropsychol 2002 May;24(3):261-9

Dpt. Psiquiatria i Psicobiologia clinica, Universitat de Barcelona, Spain.
ajurado@psi.ub.es

Obsessive-compulsive disorder (OCD) has been related to frontostriatal dysfunction, but some inconsistencies between studies and a relative paucity of neuropsychological research still characterizes the study of OCD. We compared 28 patients with OCD and matched healthy controls on two neuropsychological tests sensitive to frontal dysfunction: temporal ordering and a "feeling-of-doing" (FOD) judgment about ordering. The OCD group performed significantly worse than controls in the temporal ordering task despite showing normal recognition memory. Patients were also impaired in "feeling-of-doing" judgments suggesting they have a lack of self-awareness of their performance. Thus, the results of the current study reinforces previous research that indicates that OCD patients fail on tasks that require adequate functioning of the frontal-striatal pathways.

Massana G, Gasto C, Junque C, Mercader JM, Gomez B, Massana J, Torres X, Salamero M.

Reduced levels of creatine in the right medial temporal lobe region of panic disorder patients detected with (1)H magnetic resonance spectroscopy.

Neuroimage 2002 Jul;16(3 Pt 1):836-42

Clinical Institute of Psychiatry and Psychology, Hospital Clinic i Provincial de Barcelona, Catalonia, Spain.

In vivo proton magnetic resonance spectroscopy ((1)H MRS) was used to study possible neurochemical abnormalities in drug-free, symptomatic panic disorder patients at rest. (1)H MRS was performed in 11 panic disorder patients and 11 healthy age- and sex-matched comparison subjects. Levels of brain metabolites were determined in the right medial temporal lobe region (encompassing the whole amygdala and part of the hippocampus) and in the medial prefrontal cortex on the basis of previous work with both structural and functional neuroimaging techniques. The concentration of creatine and phosphocreatine, metabolites involved in energy-dependent systems in brain, was significantly lower in the right medial temporal lobe region of panic disorder patients compared to healthy subjects. No significant differences between the two groups were observed in the medial prefrontal cortex. These results provide neurochemical evidence suggesting the involvement of the amygdalohippocampal region in the pathogenesis of panic disorder.

Navarro V, Gasto C, Lomena F, Mateos JJ, Marcos T, Portella MJ.

Normalization of frontal cerebral perfusion in remitted elderly major depression: a 12-month follow-up SPECT study.

Neuroimage 2002 Jul;16(3 Pt 1):781-7

Clinical Institute of Psychiatry and Psychology, Hospital Clinic, Barcelona, Spain.

We examined global and regional cerebral blood flow abnormalities in a group of unmedicated nondemented elderly late-onset unipolar major depressed patients in acute depression and in remission (after a 12-month follow-up period). 35 somatic treatment remitter patients over the age of 60 years and 20 sex-, age-, and vascular risk factor-matched healthy controls were imaged with single photon emission computed tomography, using technetium-99m hexamethylpropylene amine oxime as a tracer. In depression, the depressed group had significantly lower uptake in the left anterior frontal region than the control group. In remission, the left frontal cerebral perfusion abnormalities disappeared, and there were no significant differences in uptake between controls and patients. No significant correlations were found between baseline clinical characteristics of patients and their regional cerebral perfusion at baseline or after a 12-month follow-up. These findings are consistent with the hypothesis that certain neuroanatomic regions of the central nervous system may be functionally and reversibly involved in unipolar major depression, particularly in the late-onset subgroup.

Penades R, Boget T, Lomena F, Mateos JJ, Catalan R, Gasto C, Salamero M.
Could the hypofrontality pattern in schizophrenia be modified through neuropsychological rehabilitation?

Acta Psychiatr Scand 2002 Mar;105(3):202-8

Institute of Biomedical Research August Pi i Sunyer (IDIBAPS), Barcelona, Spain.

OBJECTIVE: The effects of neuropsychological treatment on cognitive hypofrontality were examined in schizophrenic patients through the score activation. **METHOD:** Eight subjects (six men and two women) with persistent negative symptoms and cognitive impairments were evaluated with single photon emission computed tomography (SPECT) procedures and neuropsychological battery before and after a neuropsychological treatment group. **RESULTS:** After treatment an enhancement in neuropsychological performance was found, especially in executive functions. The activation score showed an increase over baseline levels and no cognitive-dependent hypofrontality after treatment was found. Although the prefrontal blood flow changes were small and non-specific, they suggest a reduction of the cognitive hypofrontality after neuropsychological treatment. **CONCLUSION:** Cognitive improvements after neuropsychological treatment would possibly be related with the diminution of the functional hypoactivity in the prefrontal areas.

Rami-Gonzalez L, Boget-Llucia T, Bernardo M, Marcos T, Canizares-Alejos S, Penades R, Portella MJ, Castelvi M, Raspall T, Salamero M.

Rev Neurol 2002 Nov 1-15;35(9):805-8

[Selective alteration of the declarative memory systems in patients treated with a high number of electroconvulsive therapy sessions]

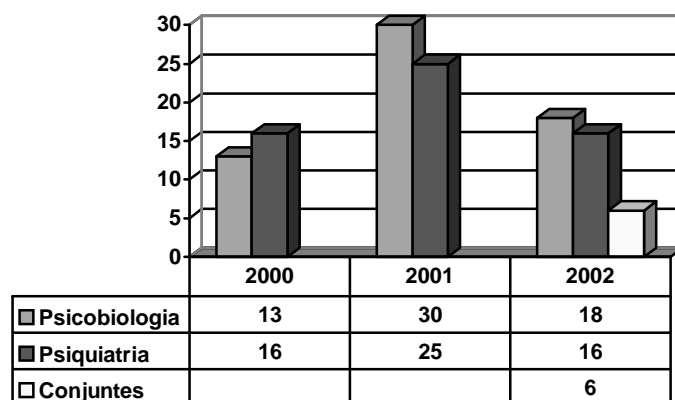
[Article in Spanish]

Servicio de Psicología. Hospital Clinic i Provincial de Barcelona, Barcelona, Espana.

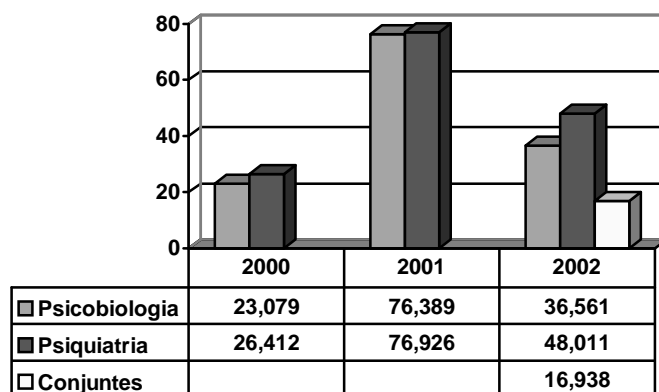
INTRODUCTION: The reversible electrochemical effects of electroconvulsive therapy (ECT) on specific areas of the brain enable the neuroanatomical bases of some cognitive functions to be studied. In research carried out on memory systems, a selective alteration of the declarative ones has been observed after treatment with ECT. Little work has been done to explore the differential alteration of the memory subsystems in patients with a high number of ECT sessions. **AIM.** To study the declarative and non declarative memory system in psychiatric patients submitted to maintenance ECT treatment, with a high number of previous ECT sessions. **PATIENTS AND METHODS:** 20 patients submitted to treatment with ECT (10 diagnosed as having depression and 10 with schizophrenia) and 20 controls, who were paired by age, sex and psychopathological diagnosis. For the evaluation of the declarative memory system, the Wechsler Memory Scale (WMS) logical memory test was used. The Hanoi Tower procedural test was employed to evaluate the non declarative system. **RESULTS:** Patients treated with ECT performed worse in the WMS logical memory test, but this was only significant in patients diagnosed as suffering from depression. No significant differences were observed in the Hanoi Tower test. **CONCLUSIONS:** A selective alteration of the declarative systems was observed in patients who had been treated with a high number of ECT sessions, while the non declarative memory systems remain unaffected.

8. GRÀFIQUES DE PUBLICACIONS

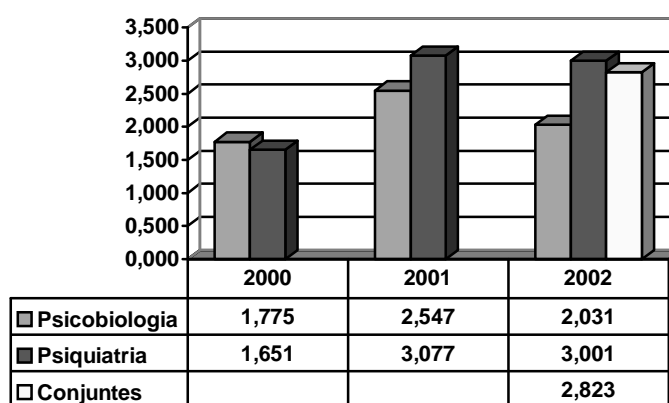
Nombre total de publicacions amb IF



Suma total de IF



Mitjana de IF



9. DOCÈNCIA

9.1. Docència de pregrau

ASSIGNATURA	CRÈD	TIPUS	ENSENY
Bases Psicològiques dels Estats de Salut i Malaltia	7,0	OBL	Med (C)
Bases Psicològiques dels Estats de Salut i Malaltia	7,0	OBL	Med (B)
Psiquiatria	11,0	OBL	Med (C)
Psiquiatria	11,0	OBL	Med (B)
Psicologia	4,5	OBL	Odon
Ciències de la Conducta	4,5	OBL	Pod
Psicofarmacologia	6,0	OBL	Psi
Practicum		OBL	Psi
Neuropsicologia Humana	6,0	OBL	Psi
Fonaments de Psicobiologia	6,0	OBL	Psi
Psicobiologia	9,0	OBL	Psi
Psicofisiologia	6,0	OBL	Psi
Adquisició i Anàlisi de les Habilitats Socials	4,5	OPT	Med (C)
Competències de comunicació	10,0	OPT	Med (C)
Drogodependències	4,5	OPT	Med (C)
Habilitats de comunicació en la pràctica assistencial	4,5	OPT	Odon
Habilitats de comunicació en la pràctica mèdica	2,0	OPT	Med (B)
Habilitats de Detecció i Maneig dels Trastorns Psicopatològics	4,5	OPT	Pod
Introducció a l'Etoprimatologia	4,5	OPT	Med (C)
Introducció a la Psicoanàlisi	4,5	OPT	Med (C)
Introducció a la Sexologia Mèdica	4,5	OPT	Med (C)
Introducció als trastorns de la conducta alimentària: Anorèxia	2,5	OPT	Med (B)
Medicina Psicosomàtica i Conductual	4,5	OPT	Med (C)
Neuropsicologia Mèdica	4,5	OPT	Med (C)
Psiquiatria d'Enllaç. Interconsulta Psiquiàtrica	4,5	OPT	Med (C)
Tractament dels Trastorns d'Ansietat i Depressió en Atenció Primària	4,5	OPT	Med (B)
Neuropsicologia infantil	6,0	OPT	Psi
Drogodependències	6,0	OPT	Psi
Psicofisiologia clínica	6,0	OPT	Psi
Etologia dels primats	6,0	OPT	Psi
Treball pràctic	6,0	OPT	Psi
Drogodependències	5,0	OPT	Far
Psicologia de la sexualitat	3,8	OPT	Psi
Bases de Biologia	3,0	LE	DIV
Redacció científica	3,0	LE	DIV
Seguretat, Salut i Prevenció de Riscos Laborals per les CCSalut	3,0	LE	DIV

OBL= Obligatòria, OPT= Optativa, LE= Lliure elecció, Med(C)= Medicina-Casanovas, Med(B)= Medicina-Bellvitge, Psi= Psicologia, Odon= Odontologia, Pod= Podologia, Far= Farmàcia, DIV= Divisió IV (Ciències de la Salut)

9.2. Doctorat de Neurociències

BIENNI	CURS	ASSIGNATURA	PROFESSOR
2001-2003	2on	Alentiment en el Trastorn Obsessiu Compulsiu Alteracions frontals en les atrofies multisistèmiques Aspectes neuropsicològics en el trastorn obsessiu compulsiu Canvis en morfologia cerebral en pacients depressius amb o sense hipercortisolèmia Circuits cerebrals de l'orientació i reorientació de l'atenció: Investigació electrofisiològica en humans Detecció i variables predictives de delirium. Efectes d'un programa d'intervenció per prevenir el delirium Estudi de seguretat cardiològica en malalts sotmesos a tractament amb clorzapina Informació clínica assistencial per a l'avaluació i planificació dels serveis d'atenció primària Intel.ligència primitiva al còrtex auditiu: Estudi electrofisiològic amb el potencial de disparitat (MMN) Marcadors de neurodesenvolupament anormal i esquizofrènia Neuropsicologia del trastorn del neurodesenvolupament Neuropsicologia i neuroimatge en esclerosi múltiple Patrons neuropsicològics en pacient amb trastorns de personalitat Qualitat de vida en transplantament hepàtic Trastorn obsessiu compulsiu i alteracions immunològiques Traumatismes cranioencefàlics lleus. Alteracions cognitives i síndrome postcommocional Vulnerabilitat genètica al deteriorament cognitiu	Julio Vallejo Carne Junqué Julio Vallejo Cristòbal Gastó Carles Escera Manuel Valdés Josep Corominas Julio Vallejo Carles Escera Cristòbal Gastó Dolors Segarra Pere Vendrell Cristòbal Gastó Julio Vallejo Josep Corominas Carne Junqué Immaculada Clemente
2002-2004	1er	Electrofisiologia en neurociència cognitiva Epistemologia de les neurociències Genètica i trastorns degeneratius del SNC Medicina psicosomàtica i conductual Psicobiologia del desenvolupament Psicopatologia d'adults Psicopatologia de la infància i l'adolescència Recerca en Neuropsicologia clínica	Carles Grau J. Corominas, W. Penzo I. Clemente, M. Sánchez Turet Manuel Valdés Dolors Segarra C. Gastó, J. Vallejo J. Toro C. Junqué, P. Vendrell