A relative increase in gray matter volume was observed bilaterally in the ventral part of the putamen and in the anterior cerebellum. All these brain alterations were abnormally correlated in patients with OCD, and age statistically significantly contributed to the relative enlargement observed in the striatal areas. Patients with prominent aggressive obsessions and checking compulsions showed reduced amygdala volume in the right hemisphere. The pattern of anatomical features depicted by this voxelwise approach is consistent with data from functional studies. The reported anatomical maps identified the specific parts of the fronto-striatal system that were altered in patients with OCD and detected changes in anatomically connected distant regions. These data further define the structural brain alterations in OCD and may contribute to constraining the prevailing biological models of this psychiatric process.

Correspondence: Carles Soriano-Mas, Carles.Soriano@crccorp.es

C. SORIANO-MAS. Neuroanatomical Models of Obsessive-Compulsive Disorder.
Recent technical developments have made it feasible to describe the structural brain alterations detected in the magnetic resonance images of a large series of patients with obsessive-compulsive disorder (OCD) using imaging procedures that allow the evaluation of volume changes. We will describe findings in a consecutive sample of 72 outpatients with OCD and 72 age- and sex-matched control subjects. Three-dimensional sequences were obtained in all participants. The brains of patients with OCD and 72 age- and sex-matched control subjects. Three-dimensional sequences were obtained in all participants. The brains of patients with OCD showed reduced gray matter volume in the medial frontal gyrus, the medial orbitofrontal cortex, and the left insulo-opercular region. A relative increase in gray matter volume was observed bilaterally in the ventral part of the putamen and in the anterior cerebellum. All these brain alterations were abnormally correlated in patients with OCD, and age statistically significantly contributed to the relative enlargement observed in the striatal areas. Patients with prominent aggressive obsessions and checking compulsions showed reduced amygdala volume in the right hemisphere. The pattern of anatomical features depicted by this voxelwise approach is consistent with data from functional studies. The reported anatomical maps identified the specific parts of the fronto-striatal system that were altered in patients with OCD and detected changes in anatomically connected distant regions. These data further define the structural brain alterations in OCD and may contribute to constraining the prevailing biological models of this psychiatric process.

Correspondence: Carles Soriano-Mas, Carles.Soriano@crccorp.es

D. MATAIX-COLS. Symptom Dimensions in Obsessive-Compulsive Disorder and Neuropsychological Performance.
This presentation will reviewed sex differences in obsessive-compulsive disorder (OCD) related to differences in neuropsychological functioning compared to healthy men and women. Participants were 56 consecutive patients (33 male, 23 female) and 40 healthy controls (20 male, 20 female) of comparable characteristics. Male and female patients had comparable symptom severity, illness duration, comorbidity, in- or out-patient status, and medication usage. An exten-
reflection may bias the individual towards risky options, and thus pre-
dispose recreational and/or harmful drug taking and relapse from ab-
stinence. Other work suggests these processes are associated with the or-
bitofrontal cortex. Future research is required to disentangle the extent
to which these impulsive effects are related to the pre-existing vulnera-
tility to substance abuse, as opposed to the damaging consequences of
long-term administration.

Correspondence: Karen I. Bolla, Ph.D., Neurology, Johns Hopkins
University School of Medicine, 4940 Eastern Ave., B Building, Rm 123,
Baltimore, MD 21224. E-mail: kbolla@jhmi.edu

Symposium 5
3:30–5:00 p.m.

Neuropsychological Dysfunction in Early
Phases of Psychosis

Discussant: Julio Bobes
Discussant: Miguel Gutiérrez

J. BOBES GARCÍA. Neuropsychological Dysfunction in Early Phases
of Psychosis.

The objective of this symposium is to explore whether the early course
of illness including first onset of psychotic symptoms influences neu-
ropsychological functioning and psychopathology in first-episode schiz-
ophrenics. Through the different presentations we will review the effect
of medication on cognitive deficits at early phases of psychotic symp-
toms, neuroimaging profiles, correlations with clinical symptoms, and
variables which influences follow-up and outcomes. The data suggests
that neuropsychological deficits in first-episode schizophrenia are in-
dependent of the early course of clinical symptoms in schizophrenia, and
although negative symptoms and higher insight are associated with the
length of the prodromal period, some early neuroimaging changes are
not determinant in the course of the illness and do not necessarily im-
ply greater neuropsychological impairment.

Correspondence: Julio Bobes García, Dpto de Psiquiatría Universidad
de Oviedo, C/ Julian Clavería, 6, 33006 Oviedo * Spain Tel + 34985
103553, E-mail bobes@uniovi.es

M. GARCÍA-PORTILLA, S. ZARAGOZA & J. BOBES. Cognitive
Dysfunction in Schizophrenic Outpatients under Antipsychotic
Treatment.

: Novel antipsychotic medications have been reported to have benefi-
cial effects on cognitive functioning in patients with schizophrenia. How-
ever, these effects have been assessed in studies with considerable vari-
ation in methodology. A large number of investigator-initiated and
industry-sponsored clinical trials are currently underway to determine
the effect of various novel antipsychotics on cognitive deficits in patients
with schizophrenia. The ability to discriminate between high- and low-
quality studies will be required to understand the true implications of
these studies and their relevance to clinical practice. This research ad-
dresses several aspects of research on cognitive enhancement in schizo-
phrenia, emphasizing how the assessment of cognitive function in clini-
cal trials requires certain standards of study design to lead to
interpretable results. Novel antipsychotic medications appear to have
preliminary promise for the enhancement of cognitive functioning. How-
ever, the methodology for assessing the treatment of cognitive deficits
is still being developed. Researchers and clinicians alike need to ap-
proach publications in this area with a watchful eye toward method-
ological weaknesses that limit the interpretability of findings.

Correspondence: Dr. Julio Bobes García, Dpto de Psiquiatría Universi-
dad de Oviedo, C/ Julian Clavería, 6, 33006 Oviedo * Spain Tel + 34985
103553, E-mail bobes@uniovi.es

B. CRESPO-FACORRO, J. RODRÍGUEZ-SANCHEZ, J. PELAYO-
TERÁN, I. BARBADILLO, A. DUARTE, R. ROIZ & J. VAZQUEZ-
BARQUERO. Neuropsychology and Neuroimaging Correlations in
First Episode Psychosis.

Authors will review the association between cognitive deficits and brain
functional and structural anomalies observed in patients with a first
episode of schizophrenia. Structural brain differences including decreased
gray matter and increased cerebrospinal fluid volumes have been ob-
served in the brains of chronically ill patients with schizophrenia. Deficits
in gray matter volume is present in patients presenting with a first episode
of nonaffective psychosis. These changes are associated to cognitive
deficits in attention, memory and executive function. A 2 year follow
up reveals that some cognitive deficits as attention and executive func-
tion may improve as part of the general improvement by the clinical
symptoms, with no significant brain equivalent changes. However, a 5
year follow up of the sample, suggest that initial improvement was tem-
poral with decrease scores in all cognitive measures (from basal assess-
ment) associated to reduction in volumes at ROI such as frontal and
parietal lobes.

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de Oviedo, C/ Julian Clavería, 6, 33006 Oviedo * Spain Tel + 34985
103553, E-mail bobes@uniovi.es

R. SEGARRA, J. IGNACIO EGUILUZ & M. GUTIÉRREZ. Course and Outcome in First Schizophrenic Episode. The Role of Insight
and Therapeutic Compliance.

Insight impairment is very common in early schizophrenia, and appears
to be associated with a broad range of psychopathology, in cognitive do-
 mains, and related to poor treatment adherence. The first part of the
presentation will review studies which have examined the clinical and
neurocognitive correlates of insight in early schizophrenia. Secondly, we
will describe this relation in an early course schizophrenia, schizoaf-
cetic, and schizophréniform disorders Spanish sample with a 5 year fol-
low-up. The clinical variations in positive and negative symptoms will
be related to the lack of insight in the sample. The characterization of
this relation over time will be described and implications for treatment
compliance, and outcomes will be discussed.

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de Oviedo, C/ Julian Clavería, 6, 33006 Oviedo * Spain Tel + 34985
103553, E-mail bobes@uniovi.es

I. BOMBIN & C. ARANGO. Cognitive Profile, Neurological Signs
and its Evolution in First-Episode Psychotic Patients: A Two-Year
Follow-up.

Patients with schizophrenia are characterized by neurological abnor-
malities, which can be assessed by bedside clinical examination. These
abnormalities have been argued to represent core features of the illness.
We review studies published since our last review in 1993 that address
the validity of neurological signs as a trait feature of schizophrenia. We
conducted a literature search in the following computer databases: MED-
LINE, PSYCHLIT, EMBASE, and COCHRANE. The search was lim-
ited to articles published from January 1988 to May 2005. Neurologi-
cal signs occur in the majority of patients with schizophrenia. Their
occurrence is independent of demographic and most medication vari-
ables. Neurological signs are strongly associated with negative symp-
toms and cognitive impairments. There is also evidence to suggest that
their occurrence is under genetic control. There is compelling evidence
to suggest the hypothesis that neurological signs represent a trait fea-
ture of schizophrenia.

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de Oviedo, C/ Julian Clavería, 6, 33006 Oviedo * Spain Tel + 34985
103553, E-mail bobes@uniovi.es

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