CORRESPONDENCE

FURTHER EVIDENCE OF DOMINANT HEMISPHERE DYSFUNCTION IN CHRONIC SCHIZOPHRENIA

Dear Sir,

The recent literature on hemispheric malfunctioning in schizophrenia seems to suggest different pathophysiological mechanisms: a specific dysfunction (Gruzelier and Venables, 1974), a non-specific overactivation of the dominant hemisphere (Gur, 1978), or a functional disconnection between the two hemispheres (Beaumont and Dimond, 1973). We are currently carrying out a neuropsychological study on a group of right-handed chronic undifferentiated schizophrenic inpatients using two simple tests which have been found useful for the evaluation of specific hemispheric affections: the Short Aphasia Screening Test (SAST), an easily administered test which measures the dysfunctions in language and visuo-spatial systems, and locates the lesions in the left, right or both the hemispheres (Heimburger and Reitan, 1961), and the Quality Extinction Test (QET), which quantifies the percentage of unilateral extinctions during bilateral simultaneous tactile stimulation of the two palms of the hands (Schwartz, 1977).

The results, reported in the Table, for 30 schizophrenics and 30 normals matched for age, sex and handedness, confirm a previous report of a dysfunction in the dominant hemisphere in schizophrenics using the SAST (Taylor, 1979). The results for the QET, here used for the first time in psychiatric patients, show a higher left side extinction in schizophrenics compared with the controls: similar data are an independent variable in future research so that the full range of possible determinants (genetic and non-genetic) could be simultaneously assessed. The diagnostic nonspecificity with which earlier onset appears associated with increased morbidity in relatives may be pointing to the involvement of general, nonspecific factors that are shared in common by all psychiatric disorders irrespective of their genetic independence. Such research might also provide a basis for estimating the extent to which gene-environment interactions play a role in these disorders.

Joe Galdi

Assistant Professor of Psychology,
Department of Psychiatry,
University of Cincinnati College of Medicine,
Cincinnati, Ohio, U.S.A.

Roland R. Bonato

Director, Biometric Laboratory,
George Washington University,
Bethesda, Maryland, U.S.A.

| TABLE |
| Distribution (\% of the total number of responses) of the errors for SAST and of unilateral tactile extinction for QET in schizophrenics and normals (n = 30) |

<table>
<thead>
<tr>
<th>SAST</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominant side</td>
<td>Non-dominant side</td>
<td>No errors</td>
</tr>
<tr>
<td>Schizophrenics</td>
<td>63</td>
<td>17</td>
</tr>
<tr>
<td>Normals</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Chi-square = 22.85 (d.f. 2) P < .01

<table>
<thead>
<tr>
<th>QET</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominant extinction</td>
<td>Non-dominant extinction</td>
<td>No extinction</td>
</tr>
<tr>
<td>Schizophrenics</td>
<td>97</td>
<td>0</td>
</tr>
<tr>
<td>Normals</td>
<td>44</td>
<td>12</td>
</tr>
</tbody>
</table>

Chi-square = 20.35 (d.f. 2) P < .01
reported in the literature for neurological patients with disease of the homolateral frontal lobe (Schwartz, 1979). This region is considered, from an anatomical point of view, to be the major neocortical projection of the limbic systems (Nauta, 1971).

These results could support the hypothesis of a dysfunction in the dominant hemisphere (Gur, 1978), and also the idea of a specific malfunctioning of the limbic system in chronic schizophrenia (Gruzelier and Venables, 1974).

S. Scarone
P. F. Garavaglia
C. L. Cazzullo

Department of Psychiatry,
Milan Medical School,
Via G.F. Besta 1,
20161 Milan, Italy

References


This book is based on a training course in progress for four years, that the authors have organized at the Johns Hopkins Hospital. It is primarily directed to those interested in using biofeedback in a clinical or research setting.

After providing the necessary background, including rationale, description of types of physiological recording techniques, the authors describe the treatment of a wide range of disorders, illustrating their methodology with detailed examples. The views put forward are in line with current thinking, in particular the employment in the therapeutic setting, of placebo and other non specific therapeutic effects, emphasizing the need for strict control of such factors in the experimental situation.

The book has a pleasant format, thorough subject and author indexes, and a useful glossary of technical terms. It is free of serious errors and should be a useful guide to the practice of biofeedback for doctors, psychologists and paramedical colleagues.

John Kogeorgos, Senior Registrar,
Section of Neurological Sciences, The London Hospital


The title of this book and the contents of its preface suggest that here is a new way of looking at psychiatry, a radical change from the old hackneyed approaches. If the reader expects this he is bound to be disappointed, for the book follows a fairly traditional line, producing an eclectic omelette of psychodynamic, social psychiatric, behavioural and organic eggs. There is an attempt to emphasise what might be called the socioholistic concept of the psychiatric patient as an entity within a social setting, but at times even this is lost sight of entirely. This is hardly surprising as the 33 contributors only share one common characteristic; they are currently members of the Department of Psychiatry at the University of Toronto. As many of them were well established outside Canada before moving to Toronto (including Henry Kedward, Alistair Munro and Richard Swinson from the United Kingdom) their approaches are bound to vary and are reflected in their writing.

The book is particularly aimed at the medical
Further evidence of dominant hemisphere dysfunction in chronic schizophrenia.
S Scarone, P F Garavaglia and C L Cazzullo
Access the most recent version at DOI: 10.1192/bjp.138.4.354