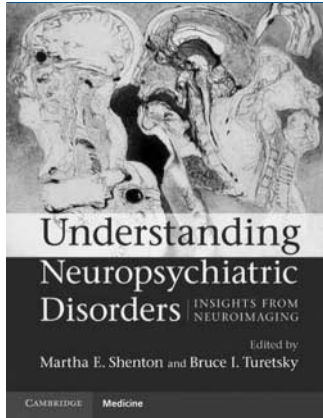


Book reviews

Edited by Allan Beveridge, Femi Oyeboode
and Rosalind Ramsay



**Understanding
Neuropsychiatric
Disorders: Insights from
Neuroimaging**

Edited by Martha E. Shenton
& Bruce I. Turetsky.
Cambridge University Press. 2011.
£125.00 (hb). 592pp.
ISBN: 9780521899420

Psychiatrists have had access to X-rays and EEGs to examine patients' heads for about 100 years, and it is about 40 years since the advent of modern brain imaging techniques like SPECT, PET, CT and MRI. They provide the most practically obtained window on the brain, the organ of interest in psychiatry. So how come we are not better versed in these procedures, do not use them routinely in clinical practice, and our knowledge of the major 'neuropsychiatric' disorders has not advanced more quickly?

The answers to these linked questions are themselves inter-related. Psychiatrists took themselves off from neurology around the turn of the past century, and continue to place greater emphasis on training in psychotherapy than in pharmacology and neuroscience. In all but old age psychiatry, we are out of the habit of ordering investigations. Certainly, there is little or no rationale for greater use of routine brain imaging in initial presentations of dementia than in first-episode psychosis, or, for that matter, in headache rather than depression, as the diagnostic yield is not any different. Partly, of course, it is in the nature of our subject – the complex disorders we attempt to manage defined as they are by the absence of gross brain pathology. And, as we are reminded in this book, it is easy to forget that the first reliable demonstrations of enlarged ventricles and reduced cerebral substance in dementia, schizophrenia and alcoholism were comparatively recent and that it is only in the past two decades that we have been able to examine compartments of the brain.

This well-produced, highly organised and informative volume represents part of the prescription required to remedialise psychiatry. Each of the major disorders receives chapters on structural, functional and chemical imaging where there are enough data to justify that. I particularly liked the regularly interspersed, wise commentaries by senior researchers who have been trailblazers in their fields, especially those by Mony de Leon and colleagues on dementia and by Scott Rauch on anxiety. Another welcome and unusual feature are the detailed tables comprehensively summarising the key findings of the studies that make up the literature in several fields. These, the text and of course some stunning illustrations make it clear that substantial progress has been and will continue to be made.

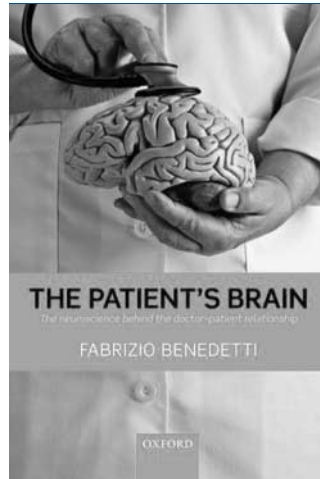
Being critical of the book for a moment, there is a sizeable gap as regards electrophysiology, although some would dispute whether that is brain imaging. The evidence for imaging abnormalities in those at high risk of schizophrenia is also

neglected, but the chapter on schizophrenia is particularly strong on the possible pathology being imaged. There is also very little on the use of machine learning to classify patient groups or on indices of clinical significance anywhere in the book, but those fields are still far from ripe. There is nothing much on developmental disorders other than autism and Williams syndrome. Most of the authors are American, but that is where most of the research was and is done. Overall, the book is excellent – without doubt the best available single resource about neuroimaging of psychiatric disorders. Although I fear my copy may end up in the hands and offices of curious colleagues, budding researchers should take note that they will need more technical detail than is available within this tome.

As image resolution inevitably improves, and innovative software analysis tools steadily accrue, we shall probably see larger and more quantitative studies that deal with comorbidity and possess the statistical sophistication to allow the '1 v. N' studies required for brain imaging to attain true clinical significance. If we psychiatrists are to retain our medical credentials, we need to improve our skills in brain imaging as in the rest of clinically relevant neuroscience. We may eventually discover blood tests for psychiatric disorders, as looks increasingly likely in dementia, or we may end up using brain imaging techniques that we cannot currently envisage, but we need to be prepared for the decent possibility that we could use novel applications of existing techniques to enable us to objectify diagnosis and treatment decisions as in the rest of medicine.

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**The Patient's Brain:
The Neuroscience Behind
the Doctor-Patient
Relationship**

By Fabrizio Benedetti.
Oxford University Press. 2010.
£34.95 (pb). 304pp.
ISBN: 9780199579518

Following on from his highly acclaimed book *Placebo Effects*, Benedetti has taken his understanding of the neuroscience underpinning the therapeutic response to turn the microscope on the doctor–patient relationship. I was doubtful when reading the publisher's critique of how access and appreciation of this knowledge would benefit physicians and psychotherapists. At first glance the book is filled with scary pictures of scans and experimental design, yet I found myself developing a huge respect for the author's vast knowledge, which he shares with the reader in a very accessible fashion. A limited grasp of neuroanatomy is required to understand the significance of the work.