



the columns

correspondence

Psychotherapy meets neuroscience

I read with interest the 'opinion and debate' article by Peter Fonagy 'Psychotherapy meets neuroscience' (*Psychiatric Bulletin*, October 2004, **28**, 357–359). While I am in agreement with the points he makes and the illustrations he uses, I think he has overlooked what is very likely to be the defining technology in the future of psychiatric treatment: neuroimaging. There is already a smattering of papers that have addressed the possible convergent brain mechanisms that underlie psychotherapeutic response and drug responses in the same disorder (for example in social anxiety disorder, e.g. Furmark *et al*, 2002). These studies are bound to increase in future years. So far, they seem to suggest that different brain regions are involved in psychotherapeutic response compared with drug response, although they may target a common final pathway such as the amygdala.

Another area of growing interest which will presumably turn into publications in the next few years is the exploration of the underlying neurochemical mechanisms of psychotherapy. For instance, our own group is currently conducting a study in which we give cognitive-behavioural therapy (CBT) for panic disorder and when patients have made a full recovery we test whether the therapeutic benefit of this intervention can be undermined by depleting brain 5-HT using the tryptophan depletion paradigm. Our preliminary data (Hood *et al*, 2004) suggest that tryptophan depletion does elicit a return of vulnerability to the panicogenic actions of a flumazenil challenge. Some earlier data from the Oxford group (Smith *et al*, 1997) using tryptophan depletion in those recovered from depression support the view that CBT effects may be mediated through serotonergic action, since they found a depressive relapse in a couple of patients who had recovered on CBT whom had never had any drug treatment for their depression.

It was pleasing to read a psychotherapist promoting a positive view of the interaction with neuroscience and I am very happy to offer my support for any

biological studies he would like to conduct in this field.

FURMARK, T., TILLFORS, M., MARTEINSDOTTIR, I., *et al* (2002) Common changes in cerebral blood flow in patients with social phobia treated with citalopram or cognitive-behavioral therapy. *Archives of General Psychiatry*, **59**, 425–433.

HOOD, S. D., NAHS, J. R., BELL, C. J., *et al* (2004) Early results from a tryptophan depletion study in panic disorder patients treated with cognitive behavioral therapy. *Journal of Psychopharmacology*, **18**, A22, MB13.

SMITH, K. A., FAIRBURN, C. G., COWEN, P. J. (1997) Relapse of depression after rapid depletion of tryptophan. *Lancet*, **349**, 915–919.

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Professor Fonagy's article (*Psychiatric Bulletin*, October 2004, **28**, 357–359) is concerned mainly with the 'elucidation of pathogenic mechanisms', so that the 'structured manualised psychotherapy techniques of the future will be designed to specifically address empirically established developmental dysfunctions'. And for the purpose 'Non-biased non subjective measures of outcome are urgently required'. To achieve this, he invokes 'scanning techniques that allow the simultaneous imaging of two individuals interacting' (i.e. in the form of electronic signals).

Having in this way identified a 'biological deficit' (i.e. in the function of the subject's brain) 'psychotherapy can be available to provide a set of techniques that the mind can use to overcome a biological deficit'.

Freud recognised that human language could not be construed as a product of 'natural laws' governing the behaviour simply of 'material particles and forces'. Rather, every utterance in a language involves some process of interpretation by each auditor, and may be as much the expression of an unconscious intention of the speaker to deceive or mislead a listener (and perhaps even the speaker himself too) as simply to inform the other. To make these problems even more

difficult in this field, untruths and errors may themselves point silently – as we all know – to unacceptable or disturbing truths and intentions to which consciousness is therefore barred.

Even the possibility of electronic systems or devices which might enable the display of evidence of such conflicts (especially in a symbolic or coded form) could surely not be called a therapy, or even humanitarian. The pursuit of understanding the origins and meanings of human mental conflict and suffering must indeed be humanitarian, perhaps one might even say humble?

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European Working Time Directive

Charles Dixon (*Psychiatric Bulletin* (Correspondence), November 2004, **28**, 426) echoes the sentiments of many psychiatric trainees who have to comply with European Working Time Directive (EWTD) rest requirements. On the one hand reduction in working hours is seen as a welcome modernisation in the life of a junior doctor, on the other hand, at the expense of senior house officer (SHO) training, delegation of tasks traditionally performed by medical staff means that front-line psychiatric practice becomes increasingly multidisciplinary.

The apparent ease with which the SHO has become dispensable from the assessment of the patient in accident and emergency (A&E) must have grave implications for psychiatrists at all levels. Nurse-led teams assessing A&E patients out of hours already call upon the services of the on-call psychiatrist if faced with the possibility of the use of the Mental Health Act 1983, following their initial, often very comprehensive assessment. If there happens to be a medical complication, there are plenty of A&E staff close at hand to give advice.

Psychiatrists, in order to avoid being perceived as supernumerary in the initial screening of the patient presenting to A&E, must ensure they are represented on