



The British Neuropsychiatry Association Newsletter

Spring 2008

The BNPA 21st Annual General Meeting Report 7/8 February 2008

On the surface, the subjects of violence and pain don't sound attractive to the average listener. However, at the BNPA winter meeting we were treated to 'an exceptional series of speakers who laid these problems bare, stripped of the anthropomorphism and institutionalized dualism which characterizes much of modern discourse.

We hit the ground running with James Blair. He got to the nub of what it means to be a psychopath; primarily a lack of affective response to suffering, mediated by the amygdala and ventral pre-frontal cortex. This has fundamental implications for the treatment of psychopathic people - in particular, that they are very unlikely to respond to aversive conditioning through punishment. It appears that this type of brain variation is highly heritable but Prof. Blair was keen to point out that psychopathy was not heritable in itself - it is rather the result of the effects of social factors upon people with emotional hypo-responsiveness. This left us with the question of what to do.

The answer in part came from Tom Fahy, who explained that psychopathy could not be reliably treated but that the risks may be better managed by structured forms of risk assessment. This method also applied to people with other mental disorders at risk of offending. Structured risk assessments had their limitations, especially in "outlying cases" (Harold Shipman would have scored as a "low" risk but he single handedly doubled the homicide rate in the UK). He elegantly introduced us to the term "Number needed to detain" which has complex consequences for law makers and the electorate.

Brain injured people are commonly irritable and, at times violent. Rodger Wood, took the patients' and carers' perspective and reported on his qualitative studies looking at the experience of irritability and aggressive behaviour. He reported 2 distinct types of behaviour which were conveniently named "walking on eggshells" and "Jekyll and Hyde", the second being paroxysmal in the setting of a normal personality in the interim. Rodger made a link between this type of aggression and epilepsy on the grounds of the temporal pattern of symptoms.

Rod Duncan bravely took on the BNPA, provocatively stating that ictal aggression did not exist, as opposed to ictal fear, which was relatively common. He also showed some compelling videos of fear before temporal and frontal complex seizures. His argument was based on the lack of modern, documented telemetry evidence of ictal aggression. Unfortunately there wasn't sufficient time to debate the evidence from case series, mostly older studies from the US. Rod reminded the audience that anti-convulsants can cause irritable behaviour (although there was no mention of topiramate in this setting) and gave some good practical advice for dealing with medico-legal cases where epilepsy might be a factor.

The standard of all the members' papers was exceedingly high this year. Highlights this year for me were Alan Carson's studies on self-help intervention for functional symptoms, Jenny Keylock's sound validation study of depression rating in Huntington's disease and Manon Grube's study that suggested the role of the cerebellum in the absolute, but not relative, passage of time.





2008 is the Chinese year of the rat. Our guest speaker Adrian Raine reminded us that “rats” have the disadvantages of being unscrupulous, calculating, selfish and callous. Their good points include persuasiveness, a charming manner and the ability to bring others along with them. They would certainly score highly on The Psychopathy Check List, which has a lower cut-off in the UK than the US, probably because the scale of the problem is bigger over the pond. According to the modern day gospel, Wikipedia, psychologists and psychiatrists are over-represented in the rat population, which caused amusement amongst the audience. Adrian, like James Blair, highlighted the structural abnormalities in the brains of criminals, particularly the hypo-frontality. He also explained that findings did not apply to some very serious and serial criminals. He touched on the fact that criminology is biased towards the study of those criminals who have been caught, and therefore, may be less good at being a criminal. Nevertheless, his studies have led to the beginning of a revolution in the criminal justice system and within society. They raise questions about the nature of free will, personal responsibility and the need for society to exact retribution. Despite these difficulties, Adrian also showed us encouraging studies on the effect of early interventions and nutrition on rates of offending.

We further supplemented this rich diet with real food and drink at the Westminster Boating Base in Pimlico. Food and drink flowed freely, a string quartet played Welsh melodies and Rodger Wood sang along to celebrate his birthday. This was a time to catch up with old friends and make some new ones. Dr. Marta Elian regaled us with the story of the Hungarian “divorce” of neurology and psychiatry in the 1930’s, when she was a student. These stories are entertaining but also a vital part of the heritage and tradition of neuropsychiatry, which may be at the beginning of its second renaissance. Young trainees approached older hands looking for advice about training and jobs. They were reassured by the appearance of a neuropsychiatry curriculum and by the gradual increase in consultant posts resulting from Foundation Trusts.

Friday morning was pain related, particularly headache. Holger Kaube likened his remit of “the aetiology and treatment of headache” to being asked to talk about the aetiology and treatment of cancer in 30 minutes! Nevertheless he did an excellent job, particularly pointing out the behavioural and evolutionary basis of “common or garden migraine” which may be instigated in the periaqueductal grey as a response to threat but then takes on positive feedback loops of its own. The idea of a “top down” route to pain was novel rather than viewing pain as a brain response to peripheral stimulus. Dr Kaube, also looked at some novel procedures for treatment including stimulation of the C2 nerve distribution which was described as having a “massive afferent band width” and may explain the success of chiropractice (?).

Predrag Petrovic gave a fascinating account of functional imaging studies of pain, which go some way towards explaining the placebo effect. If, as seems to be the case, watching another person undergoing pain activates similar systems to those activated when one suffers pain oneself, it becomes intelligible that pain can also be eased by ‘top-down’ influences, including the expectation of relief created by placebos.

Following on from this Charlotte Feinmann and Amanda Williams both stressed the holistic framework for the management of pain, particularly that pain affecting the face. They both stressed the need for a “toolbox” of psychological and social therapy skills as well as a strong therapeutic relationship.



The afternoon was dedicated to the evolution of the human mind. Chris Stringer started with a lecture on the Basics of human evolution. We are now able to extract DNA from fossils and to date them accurately. When humans started to be more carnivorous (about 2.5 million years ago) they could extract energy from food more efficiently, which meant that more energy was available for brain growth. The favoured model for human evolution currently is the "radial model" where there are several lines of evolution postulated of which Homo sapiens is the sole survivor.



Neanderthals were burying their dead around 60,000 years ago. They ate mammoths, among other creatures. They were short, squat, powerful, big brained, cold adapted and were highly carnivorous. Homo sapiens and Neanderthals co-existed in Europe before Neanderthals gradually died out. Homo sapiens at that stage had migrated from Africa and had quite elaborate social rituals.



Robin Dunbar noted that brains need a lot of energy to work well. Working within groups requires even more brain energy (and bigger brains) but can deliver benefits to the selfish genes we carry. He argued that group sizes form particular patterns in humans (e.g. 5, 15, 50, 150) with sharp delineations between the group sizes in terms of intimacy. The larger of these groups is exemplified by a church congregation, a company in the army or a Neolithic village. This argument works well for primates but less well for less sophisticated animals such as ants.

Prize giving followed the session on evolution. The Lishman prize (for members' papers) went to Drs Voon and Craig with Jenny Keylock as runner up.

Hugh Rickards
Secretary



Members News

The 2009 BNPA AGM will take place on 4/5/6 February 2009 at the Institute of Child Health, London. With a possible extra day with the Neuropsychiatry Special Interest Group (SIGN).

Medico-Legal Register

Members are invited to submit their short CV and contact details for the BNPA medico-legal register to Jackie by email at jashmenall@yahoo.com. The register is sent to solicitors requesting medico-legal experts.

The Royal Society of Medicine, 1 Wimpole Street, London, W1G 0AE

SLEEP AND CONSCIOUSNESS - Oct 15 2008

Topics include: What is consciousness?, consciousness and the clinician, Vegetative and other states of consciousness, Is unconsciousness in sleep the same as in coma and anaesthesia?, Sleep and consciousness Visualizing sleep states and consciousness, Dreaming, Responsibility, conscious awareness and action and parasomnias.

Speakers include: Adam Zeman, Adrian Owen, Stephen Laureys, Patrick Haggard, Bidi Evans and Patrick Haggard

For booking and application forms Email: sleep.disorders@rsm.ac.uk

Practical Cognition Course

Sponsored by the Guarantors of Brain

For neurologists, psychiatrists and neuropsychologists
SAGE Centre Newcastle, 16/17 October 2008

This course is for trainees and consultants who want to develop their practical expertise in cognitive assessment and relate this to clinically relevant neuroscience.

Problems with memory, language, perception and executive function are widespread among patients with neurological disease and can cause profound disability. As clinicians, however, we frequently struggle to assess and treat these cognitive difficulties. Whilst recent developments in cognitive neuroscience have led to an explosion in the understanding of how brain disease affects core psychological functions, these findings rarely make it from the journals to the clinic. This course aims to bridge that gap in a way that will help all clinicians and not just aficionados.

The course is designed for trainees and consultants in adult neurology, psychiatry and clinical neuropsychology. The three half-day sessions will each begin with a series of case presentations discussing the assessment, diagnosis and management of common cognitive syndromes. The course begins and ends with the patient, and the case presentations will include video material that illustrates disorders that neurologists, psychiatrists and neuropsychologists might realistically see in their usual practice. In each session the cases will be followed by a talk from an invited expert, who will provide a framework for understanding the clinically relevant neuroscience.

This year, the topics to be covered are:

- Disorders of language – speaker: Alex Leff, National Hospital for Neurology and Neurosurgery, Queen Square, London
- Disorders of memory – speaker: Dharshan Kumaran, National Hospital for Neurology and Neurosurgery, Queen Square, London
- Frontal lobe syndromes – speaker: Paul Fletcher, Department of Psychiatry, Addenbrooke's Hospital, Cambridge

The course will be held at the new SAGE Centre in Gateshead (<http://www.thesagegateshead.org>) in the heart of Newcastle-Gateshead. There are plentiful hotels within walking distance. There is excellent rail and road access and nearby Newcastle airport is easily accessed by taxi or Metro.

To register, please email Umbereen Rafiq (umbereen.rafiq@newcastle.ac.uk). The cost of the course is £100 per delegate before July 31 (£140 after). The fee includes a course dinner on the evening of 16 October. Registration will be confirmed upon receipt of payment (which is non-refundable).

Further questions for the course organisers (Tim Griffiths and Chris Butler) can also be sent to Umbereen Rafiq (umbereen.rafiq@newcastle.ac.uk).

Please submit short articles to:

The British Neuropsychiatry Association

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