

- 21 Andreasen NC, Rice J, Endicott J, Coryell W, Grove WM, Reich T. Familial rates of affective disorder. A report from the National Institute of Mental Health Collaborative Study. *Arch Gen Psychiatry* 1987; **44**: 461–9.
- 22 Bertelsen A, Gottesman II. Schizoaffective psychoses: genetical clues to classification. *Am J Med Genet* 1995; **60**: 7–11.
- 23 Farmer AE, McGuffin P, Gottesman II. Twin concordance for DSM-III schizophrenia. Scrutinizing the validity of the definition. *Arch Gen Psychiatry* 1987; **44**: 634–41.
- 24 Gershon ES, Hamovit J, Guroff JJ, Dibble E, Leckman JF, Sceery W, et al. A family study of schizoaffective, bipolar I, bipolar II, unipolar, and normal control probands. *Arch Gen Psychiatry* 1982; **39**: 1157–67.
- 25 Maier W, Lichtermann D, Minges J, Hallmayer J, Heun R, Benkert O, et al. Continuity and discontinuity of affective disorders and schizophrenia. Results of a controlled family study. *Arch Gen Psychiatry* 1993; **50**: 871–83.
- 26 Slater E, Cowie C. *The Genetics of Mental Disorders*. Oxford University Press, 1971.
- 27 Cardno AG, Rijdsdijk FV, Sham PC, Murray RM, McGuffin P. A twin study of genetic relationships between psychotic symptoms. *Am J Psychiatry* 2002; **159**: 539–45.
- 28 Williams NM, Preece A, Spurlock G, Norton N, Williams HJ, Zammit S, et al. Support for genetic variation in neuregulin 1 and susceptibility to schizophrenia. *Mol Psychiatry* 2003; **8**: 485–7.
- 29 Park N, Juo SH, Cheng R, Liu J, Loth JE, Lilliston B, et al. Linkage analysis of psychosis in bipolar pedigrees suggests novel putative loci for bipolar disorder and shared susceptibility with schizophrenia. *Mol Psychiatry* 2004; **9**: 1091–9.
- 30 Potash JB, Zandi PP, Willour VL, Lan TH, Huo Y, Avramopoulos D, et al. Suggestive linkage to chromosomal regions 13q31 and 22q12 in families with psychotic bipolar disorder. *Am J Psychiatry* 2003; **160**: 680–6.
- 31 Maier W. Do schizoaffective disorders exist at all? *Acta Psychiatr Scand* 2006; **113**: 369–71.
- 32 Vollmer-Larsen A, Jacobsen TB, Hemmingsen R, Parnas J. Schizoaffective disorder – the reliability of its clinical diagnostic use. *Acta Psychiatr Scand* 2006; **113**: 402–7.
- 33 Lake CR, Hurwitz N. Schizoaffective disorder merges schizophrenia and bipolar disorders as one disease – there is no schizoaffective disorder. *Curr Opin Psychiatry* 2007; **20**: 365–79.
- 34 Malhi GS, Green M, Fagiolini A, Peselow ED, Kumari V. Schizoaffective disorder: diagnostic issues and future recommendations. *Bipolar Disord* 2008; **10**: 215–30.
- 35 Dudbridge F, Gusnanto A. Estimation of significance thresholds for genomewide association scans. *Genet Epidemiol* 2008; **32**: 227–34.
- 36 Craddock N, Jones L, Jones IR, Kirov G, Green EK, Grozeva D, et al. Strong genetic evidence for a selective influence of GABA_A receptors on a component of the bipolar disorder phenotype. *Mol Psychiatry* 2008 July 1 (epub ahead of print).
- 37 Martin CL, Duvall JA, Ilkin Y, Simon JS, Arreaza MG, Wilkes K, et al. Cytogenetic and molecular characterization of A2BP1/FOX1 as a candidate gene for autism. *Am J Med Genet B Neuropsychiatr Genet* 2007; **144B**: 869–76.
- 38 Bhalla K, Phillips HA, Crawford J, McKenzie OL, Mulley JC, Eyre H, et al. The de novo chromosome 16 translocations of two patients with abnormal phenotypes (mental retardation and epilepsy) disrupt the A2BP1 gene. *J Hum Genet* 2004; **49**: 308–11.



extra

Bolts from the past

Peter Tyrer

'Hello, you probably don't remember me. I'm one of your first patients. I had two leucotomies', boomed a familiar voice down the telephone. There are not many psychiatrists who have had patients who have had two leucotomies and I immediately recognised who this person was. She wanted to touch base with me after all these years to let me know how she was doing. This seemed a perfectly reasonable request and so we arranged to meet when she next came to London. The appointment was duly made and I went to the interview in a state of some trepidation, not least because my former patient, probably because of her two leucotomies, was not exactly backward in coming forward. 'I've been told I'm like a saucepan on which they forgot to put on the lid' she told me at our meeting. But there she was, 42 years older than when I last saw her, but looking surprisingly youthful and, despite the alleged effect of leucotomy, showing no significant deviation from the personality that I became aware of all those years ago. 'You haven't changed a bit, you're exactly the same patient I saw over 40 years ago', I said in a genuine search for accuracy. 'Nonsense', she boomed again, 'you told me I was your most difficult patient'. 'Yes, that's what I mean', I said, 'you haven't changed'. She playfully struck me and I told her she was acting outrageously. 'You're the one to talk', she countered, 'I've an excuse to be outrageous; I've had two leucotomies'. And so our conversation continued. What she wanted to impress on me was that the consultant who recommended her leucotomies, Dr William Sargant, was a lovely man and she had no hard feelings about him recommending two leucotomies as she would have been 'an absolute pain without them'. Perhaps this last message was the most important one. We read repeatedly about the vegetable-like existence of many of those who received leucotomies in the past, but even the most maligned of treatments is not universally awful.

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