

Our findings provide strong circumstantial evidence that small enhancing foci on MRI represent cancer foci and that MRI is highly sensitive for the detection of invasive or in-situ cancer foci. However, small cancer foci may never become clinically apparent in a woman's lifetime,^{1,2} and therefore resecting them may not be necessary. We fear that the high sensitivity of MRI for breast cancer detection would result in many women suffering unnecessary mastectomies. Our results suggest that MRI could be used to investigate prospectively the clinical significance of unresected cancer foci in order to convincingly determine their natural history in the context of breast conserving surgery. Such a study would be deemed ethical because breast MRI is still considered experimental for preoperative planning of surgery.

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Galactorrhoea with moclobemide

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Moclobemide is a reversible inhibitor of monoamine oxidase type A (RIMA), indicated for the treatment of major depression. It decreases cerebral metabolism of noradrenaline, dopamine, and serotonin, leading to increased concentrations at neuronal synapses.¹ Moclobemide also has the potential to raise serum prolactin, presumably via serotonergic mechanisms,² although this has not hitherto been noted to have any clinical effects. Known adverse drug reactions include sleep disturbance, dizziness, nausea, headache, and confusional states.¹

We did a study of moclobemide by prescription-event monitoring (PEM), a technique of post-marketing surveillance for newly-marketed drugs.³ We report the incidence of galactorrhoea while on moclobemide, compared with other psychotropic medications, also studied by PEM. This analysis was data-driven, in response to a signal generated by PEM output. The table shows adjusted rate ratios for moclobemide versus four selective serotonin reuptake inhibitor (SSRI) anti-depressants, fluvoxamine, paroxetine, fluoxetine, and sertraline, none of which are known to cause galactorrhoea,⁴ and risperidone. Risperidone is an anti-psychotic, for which galactorrhoea is a listed side-effect:

Drug	Cohort size-total	Cohort size-female	Number of verified reports on treatment	Crude rate per 1000 patient-months on treatment	Rate standardised for age/sex*	Adjusted rate ratio (95% CI)†
Risperidone	7 684	3 500	25	1.05	0.96	32.0 (13.7–69.5)
4 SSRI drugs	50 150	34 565	4	0.03	0.03	1
Moclobemide	10 835	6 824	6	0.20	0.20	6.7 (2.7–15.0)

*All study drugs as reference population. †SSRIs as base.

All the cases of galactorrhoea were in women under age 50. In two, the patient was also on anti-psychotic medication: the first of these had been prescribed a wide variety of psychotropic medication previously, but she clearly recalled the onset of galactorrhoea after starting moclobemide, and its prompt cessation after withdrawal of the drug. The second had been on chlorpromazine, 200 mg four times a day, for 3 years, but galactorrhoea started 1 month after moclobemide was added.

The rate ratios show that galactorrhoea is significantly associated with the use of moclobemide (assuming that the rate on the SSRI drugs is baseline), although the relative risk is not so great as with risperidone. There have been four reports of galactorrhoea on moclobemide to the Committee on Safety of Medicines (L Davies, personal communication). This adverse event is biologically plausible, and prescribing doctors should be aware of the possibility of its occurrence. It does not appear in the Summary of Product Characteristics for moclobemide.

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- 2 Freeman H. Moclobemide. *Lancet* 1993; **342**: 1528–31.
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Clinical experience of UK medical students

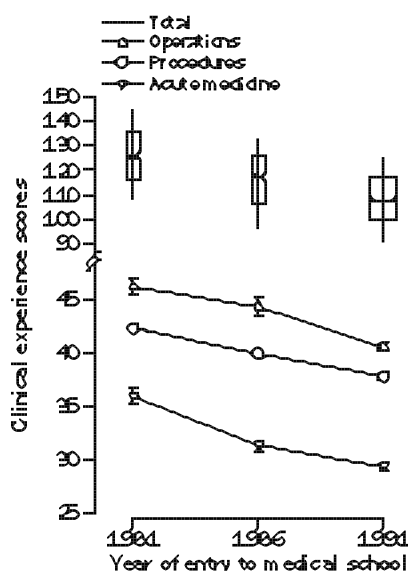
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In 1993 we reported the clinical experience of UK medical students,¹ and found that students entering in 1986, who qualified in 1991/92, had less experience than those entering in 1981 and who qualified in 1986/87. We now describe data on 1991 entrants who qualified in 1996/97.

Final-year medical students in UK medical schools who had previously taken part in prospective surveys of medical-student selection² were sent a questionnaire about 4 months before their final examinations which asked about their clinical experience of the 14 acute medical conditions, 18 surgical operations, and 15 practical procedures common to all three questionnaires.³ Summary scores were calculated as described previously,¹ along with the simple total of the three scores (figure). Sample sizes for the 1981, 1986, and 1991 cohorts were 337, 381, and 1481, corresponding to 65%, 51%, and 59% of possible respondents. Evidence presented elsewhere suggests that respondents are an unbiased subset of all students.³

Analysis of variance showed significant downwards linear

*The surgical operations were: amputation; appendectomy; arterial surgery; caesarean section; cardio-pulmonary bypass; cataract extraction; (open) cholecystectomy, gastrectomy or V&P; (open) herniorrhaphy; internal fixation of fracture; large bowel resection; laryngectomy; mastectomy; mastoidectomy; removal of cerebral tumour; skin grafting; thyroidectomy; transurethral prostatectomy. The acute medical conditions were: acute glaucoma; acute left ventricular failure; acute psychosis; acute upper GI bleeding; diabetic keto-acidosis; hypoglycaemia; hypothermia; lobar pneumonia; meningitis; myocardial infarction; pneumothorax; status asthmaticus; status epilepticus; sub-arachnoid haemorrhage. The practical procedures were: arterial puncture; bladder catheterisation (male); bone marrow aspiration; colonoscopy; electrocardiography; endotracheal intubation, external cardiac massage; gastroscopy; insertion of CVP line; lumbar puncture; setting up an IV drip; sigmoidoscopy; suturing in casualty; urine testing; ventricular defibrillation.



Clinical experience scores for students entering medical school in 1981, 1986, and 1991

Top, median, 25th and 75th percentiles of total experience scores with the 10th and the 90th percentiles. Width proportional to the sample sizes, notches 95% CI for the median. Bottom, mean scores (± 2 standard errors) for surgical operations, practical procedures, and acute medical conditions.

trends across cohorts for all four scores ($p < 0.001$). Analysis of the individual experiences showed significant ($p < 0.05$) downwards trends for 13 of 14 acute medical conditions, 12 of 18 surgical operations, and 14 of 15 practical procedures. Experience of only one medical condition (acute glaucoma) and one practical procedure (colonoscopy) had increased ($p < 0.05$) across the time interval. We recognise that clinical practice has inevitably changed to some extent over a decade, as we discussed previously,¹ but that is unlikely to be able to explain the trend across almost all the measures we looked at, be they operations, medical conditions, or practical procedures.

The relative size of the downwards trend is large, being about 1.2 standard deviations across a decade. The box and whisker plots in the figure show that the score of the 25th percentile for the 1981 cohort is similar to the median for the 1986 cohort and to the 75th percentile for the 1991 cohort. Calculation of the absolute change (using a transformation of the scores plotted in the figure) suggests that the experience of the 1991 cohort was about 23% less than that of the 1981 cohort.

Clinical experience has always been the mainstay of UK medical training and any deterioration must be of concern. The reasons for the decline described here are not entirely clear, but may be related to changes either in NHS organisation or in medical-school curricula. Radical changes in the medical curriculum currently in process⁴ could further alter the clinical experience of students, as also might recent proposals to increase the number of medical students.⁵

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Eclampsia complicated by bilateral retinal detachments and abnormal eye movements

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We report a case of eclampsia complicated by bilateral retinal detachments and abnormal eye movements following treatment with magnesium sulphate ($MgSO_4$).

A 24-year-old woman (gravida 4, para 1) with a history of placental insufficiency and fetal growth retardation was admitted to the labour suite at 35 weeks' gestation, with nausea, vomiting, epigastric pain, and severe frontal headache. Blood pressure readings were 190/123 mm Hg with mean arterial pressures ranging from 140-144 mm Hg. Proteinuria was present at 6 g per 24 h and examination revealed bilateral brisk reflexes without clonus. The blood pressure was stabilised with two 5 mg boluses of intravenous hydralazine and she was transferred to theatre for delivery by caesarean section. She had an eclamptic fit, 2 h after surgery, at mean arterial pressure levels of 130-133 mm Hg on 10 mg/L maintenance hydralazine infusion. Eclampsia was managed with a loading dose of 2.5 g $MgSO_4$ followed by a second dose of 5 g $MgSO_4$ in 10 mL normal saline given over 15 min. Maintenance magnesium sulphate at 2.5 g/h was infused over the next 48 h and magnesium concentrations remained therapeutic at 3-4 mmol/L. The clotting profile showed a prolonged activated partial thromboplastin time at 40.2 s with increased D-dimer and a platelet count of $36 \times 10^9/L$. This was corrected with four units of fresh frozen plasma and eight units of platelets. Postictally the patient immediately described blurring of vision and diplopia. Ophthalmological examination revealed a left divergent squint with diplopia in all directions of gaze. Fundoscopy revealed a total left retinal detachment and a partial right retinal detachment which originated from the peri-papillary region. Upbeat nystagmus was demonstrated in upgaze and endpoint nystagmus on both dextroversion and laevoversion. She had no demonstrable convergence.

Her visual acuity improved spontaneously over the next 48 h. 4 h after stopping $MgSO_4$ good convergence returned and the diplopia resolved. Maintenance hydralazine had been stopped 12 h after the fit. Nystagmus resolved 2 days after stopping $MgSO_4$. On the 4th postoperative day, funduscopy revealed an isolated serous detachment in the right eye and a small residual detachment in the left, which subsequently resolved. There was complete resolution of visual symptoms and return of normal visual acuity.

Our patient presented with two rare complications of eclampsia. Retinal detachments have been reported previously but this is, to our knowledge, the first report of abnormal eye movements with the use of $MgSO_4$ following an eclamptic fit. Retinal detachment as an ocular complication of eclampsia was first described by von Graefe in 1855.¹ Fry reported that 10% of eclamptics have associated retinal detachments, which are often bilateral.²