This week in the BMJ

Google is a good diagnostician

Using signs and symptoms as search terms on Google finds the correct diagnosis 57.7% of the time (95% confidence interval 38.3% to 77.1%) say Tang and Ng (p 1143). The authors identified 26 case reports published in a single journal and selected three to five specific symptoms and signs from each to be used as Google search terms. They compared Google results with the original diagnoses. Google searching is less helpful in identifying complex diseases with non-specific symptoms than in diagnosing illnesses with unique symptoms.

Should statins be used perioperatively?

Using statins may prevent perioperative cardiovascular events, suggest Kapoor and colleagues (p1149) in their analysis and comment article. A large randomised controlled trial is needed to provide a definitive answer to this question.

Acute rheumatic fever is still a clinical challenge

Acute rheumatic fever, now rare in high income populations, remains highly prevalent in developing countries where access to health care is poor, says Gilliers (p 1153) in her clinical review. Although it is known to be caused by humoral and cell mediated immune responses to group A beta haemolytic streptococcus antigens, the syndrome of carditis, polyarthritis, and skin or neurological changes is still not completely understood. Only 0.3-3% of patients with acute streptococcal pharyngitis develop rheumatic fever and a genetic predisposition is certain.

Practice based commissioning shares flaws of fundholding

Labour’s policy of practice based commissioning seems to have similar problems to the GP fundholding scheme that was abolished in the 1990s, according to Greener and Mannion in their analysis and comment article (p 1168). Under both schemes, purchasing secondary care out of a primary care budget increased GPs’ awareness of resource economics. But patients’ satisfaction seems to have been reduced in line with increased managerial responsibilities of GPs. The authors suggest that the high administrative costs of practice based commissioning would make collaboration between practices a cost effective solution.

Don’t miss acute angle closure glaucoma

Angle closure glaucoma is a rapidly progressing ophthalmic emergency that can lead to blindness. Unusual presentation may mean that the diagnosis is missed or treatment is delayed. In their lesson of the week, Gordon-Bennett and colleagues (p 1157) discuss three cases of angle closure glaucoma that were initially misdiagnosed. The authors call for a high index of suspicion of this condition when patients present with blurred vision, headache, and a red eye, especially if they are taking drugs that could alter intraocular fluid dynamics.
Midtrimester amniocentesis is safer than we thought

**Research question** What is the risk of pregnancy loss after a midtrimester amniocentesis?

**Answer** An estimated 0.06% (95% CI 0.06% to 0.26%) of pregnancies lose a baby after amniocentesis.

**Why did the authors do the study?** Women are traditionally advised that the risk of pregnancy loss after amniocentesis is around 0.5%, based on research conducted in the 1970s. These authors wanted to update this figure to take account of modern practices such as ultrasound guidance.

**What did they do?** They analysed data from 35,003 women with singleton pregnancies who had taken part in a trial of two different types of serum screening for Down’s syndrome (first trimester v second trimester screening). The trial finished recruiting in 2002. Women who screened positive in either arm were offered amniocentesis in the middle of the second trimester. Women who screened negative could also request an amniocentesis. All women were followed up until the end of their pregnancy.

These authors compared the 3096 women who had amniocentesis with the 31,907 women who did not to see if there was any difference in the percentages who had unintended pregnancy loss before the 24th week of gestation. They used further analyses to estimate the odds of pregnancy loss in these two groups after accounting for a wide range of confounding variables, including age, body mass index, history of diabetes, pregnancy history, and serum screening results.

**What did they find?** Of the women who had an amniocentesis, 1.0% lost their babies before 24 weeks, compared with 0.94% of the women who did not have an amniocentesis. So an estimated 0.06% of losses were directly due to amniocentesis. The 95% confidence intervals around this estimate went from 0.4% to 0.7%. In subgroup analyses, amniocentesis was associated with a lower rate of unintended pregnancy loss for women aged over 35 (0.2% to 0.6%), and for women with positive serum screening results (0.3% to 0.4%).

**What does it mean?** The risk of losing a baby after an amniocentesis is lower than previously thought and may be no different from the background risk of spontaneous miscarriage. The odds of unintended pregnancy loss were actually lower after amniocentesis in this study, presumably because some women whose babies had chromosomal abnormalities detected by amniocentesis terminated their pregnancies deliberately instead.

Results from subgroup analyses support this view. There were certainly more elective terminations among women having amniocentesis (91/3096, 2.9%) than among controls (67/31,907, 0.2%), but the reasons were not recorded.

This study included a large number of unselected women who had their amniocentesis in clinics and hospitals across the US, so the findings should be generalisable to modern practice in other developed countries. Women can be reassured that midtrimester amniocentesis is reasonably safe, and the risk of losing a baby is nearer 1 in 1600 than the more traditionally cited 1 in 200.


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Editor’s choice

**Jam tomorrow**

Too many doctors and nurses, said the health secretary Patricia Hewitt last week when asked to explain NHS deficits. Lisa Hitchen demurs (p 1142).

People interviewed for the BMJ said that rising debts were due to primary care trusts struggling with their new role as commissioners and over hasty reorganisation. Is this special pleading? Chris Ham thinks not. Government policies have accentuated the challenges of long term change in service provision, he writes (p 1135). Improvements will not come simply through the invisible hand of the market.

Does this mean that practice based commissioning is not the panacea policy makers had hoped for? Ian Greener and Russell Manning find that it shares many of the problems of fundholding (as well as some of its potential benefits) and will have little effect on hospital care (p 1168). They think the way forward is to go back to the primary care groups model of 1997, which was introduced to tackle the problems of fundholding. More doctors in management and politics would also help, says Adam Greenbaum (p 1174).

Management and political skills are not yet, but perhaps should be, on the list of competencies that junior doctors need to acquire as they navigate the labyrinth of the United Kingdom’s new training structures. This week’s Career Focus (www.careerfocusbmj.com) should help to demystify the reforms embodied in Modernising Medical Careers (MMC). My reading is that the rationale of MMC is excellent—it has the potential to deliver far more coherent training and development for doctors; but the implementation has fallen on the shambolic side of ideal.

Junior doctors, and those advising them, are still largely in the dark about the process, but there is little likelihood that calls for the new system to be postponed will be heeded. MMC’s national director, Alan Crockard, believes it is time to “take a very deep breath and get on with it” (doi: 10.1136/bmj.39028.480417.7D). Those applying in January may find comfort in the view that “while the MMC application process seems shrouded in mystery, it will be almost identical in its requirements to the current system we know and understand” (doi: 10.1136/bmj.39037.627396.CE).

UK medical students should find that it has all been resolved by the time they qualify, which means they can get on and enjoy reading the studentBMJ. We know that it is also read by many doctors, especially clinical tutors, who use the material in their teaching. You can access it free online (www.studentbmj.com).

The December issue marks 25 years since the first case of HIV/AIDS. In it Robert Gallo, co-discoverer of the virus, reminds us that the disease kills more than 250 000 people—akin to a tsunami—every month. He calls for sustained research to find new ways of preventing and treating this global pandemic. In a personal view in the BMJ (p 1179), the editor of studentBMJ, Balaji Ravichandran, writes, if we are to achieve the dream of not “celebrating” the 50th anniversary, we need to act fast.

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