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EDITOR'S CHOICE

Thyrombolysis, thyroid cancer, and the need for scepticism

Fiona Godlee *editor, BMJ*

Back in June, Jeanne Lenzer wrote an article about why it's hard to trust clinical guidelines (*BMJ* 2013;346:f3830, doi:10.1136/bmj.f3830). Her central point was that guideline panels are still rife with conflicts of interest. She took as her main example the current guidelines promoting thrombolysis in acute stroke, about which the evidence is heavily disputed. She quoted several opinion polls showing that most emergency doctors remain unconvinced. Among the many rapid responses was one on behalf of the American Academy of Neurology, written by some of the authors of their guideline, which we publish as a letter this week (doi:10.1136/bmj.f5324). They highlight "errors and omissions" in Lenzer's article and they stand by their recommendations for the use of intravenous alteplase in acute ischaemic stroke.

In her reply (doi:10.1136/bmj.f5322), Lenzer points out that, to strengthen their case that alteplase is safe and effective, they cite the endorsement of the drug by multiple guideline panels, most comprising panellists with ties to the manufacturer. All four authors of the academy's response acknowledge such ties at the end of their letter. Lenzer suggests that, in view of the degree of uncertainty and debate, the academy should have included expert sceptics on the guideline panel instead of trying to debate the science with the journalist who reported the problem.

Two such expert sceptics give their view of the evidence in this week's Head to Head debate (doi:10.1136/bmj.f5215). While Graeme Hankey argues that there is evidence of benefit from thrombolysis in selected patients with stroke, Simon Brown and Stephen Macdonald say there is clear evidence that thrombolysis harms some patients early in their treatment, including some who might otherwise have made a full recovery. Meanwhile the evidence of benefit, from trials and industry funded datasets, is flawed, they say; and until better evidence emerges, thrombolysis should be given only within high quality placebo controlled trials.

Scepticism is also an essential in the face of new diagnostic categories and technologies. This week, the *BMJ*'s Too Much Medicine campaign turns its attention to the overdiagnosis and treatment of thyroid cancer. Although a small proportion of thyroid cancers are dangerous and need intensive treatment, most are small and indolent and, according to Juan P Brito and colleagues (doi:10.1136/bmj.f4706), may never progress to cause symptoms and death.

Thyroid cancer shows many of the pathognomonic signs of an overdiganosed condition: increasing incidence with little change in mortality, a correlation between access to medical care and rates of diagnosis, new tools for detecting smaller and earlier disease, autopsy studies showing high rates of undetected thyroid nodules, incidental detection on computed tomography and magnetic resonance imaging scans for other indications.

When small asymptomatic nodules are found, patients are offered and tend to accept surgery. The treatment is invasive, costly and linked to burdensome complications, as well as lifelong thyroid replacement therapy and monitoring. The authors say we must wait for well designed randomised trials comparing immediate surgery and surveillance. And in the meantime they call for a change in terminology. Instead of labelling patients with papillary thyroid cancer, they propose a more benign term, micropapillary lesions of indolent course, or microPLICS.

This will be one of many examples of overdiagnosis being discussed next week (10-12 September) at the Preventing Overdiagnosis conference in Dartmouth, New Hampshire (www.preventingoverdiagnosis.net/). If you're not able to be there in person, do follow it on Twitter at #PODC2013.

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fgodlee@bmj.com