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EDITOR'S CHOICE

When to scan? When to treat?

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We have explored two common clinical dilemmas in *The BMJ* in recent weeks: whether a child who vomits after a head injury should have undergo computed tomography; and whether an adult with subclinical hypothyroidism should be offered thyroxine.

Head injuries are common in children. Simon Hardman and colleagues say that emergency departments in UK hospitals see nearly 35 000 cases a year, most of which are minor, with no or only mildly impaired consciousness (doi:10.1136/bmj.l1875). They ask to what extent vomiting is predictive of brain injury and what frequency of isolated vomiting should prompt a CT scan. Guidelines differ, as does current practice around the world: in the US a third of children with head injuries undergo imaging. How should clinicians and parents better balance the small but well evidenced increased risk of cancer from CT scanning against the low risk of serious brain injury?

Hardman and colleagues conclude that the current guideline of the UK National Institute for Health and Clinical Excellence gets this balance right. They interpret this as observing for four hours children who present with a minor head injury and three or more episodes of isolated vomiting. For children presenting with a minor head injury who have four episodes of isolated vomiting, including one during a period of observation, they suggest review by a senior clinician.

NICE guidance fares less well when it comes to subclinical hypothyroidism. The expert panel responsible for our Rapid Recommendation concludes that thyroxine should not be routinely offered to adults with raised thyroid stimulating hormone levels but normal thyroxine levels, whatever their age (doi:10.1136/bmj.l2006). Their review of the evidence finds no important difference in quality of life or symptoms of fatigue, depression, or cognitive decline, nor in mortality or rates of cardiovascular events. They also highlight the burden to patients of daily medication, long term monitoring, and risk of overdose.

Use of thyroxine is rising in many countries. In the US it is now one of the most frequently prescribed drugs, and the UK has seen a substantial rise in the prevalence of treated subclinical hypothyroidism in the past 20 years. Our Rapid Recommendation's strong conclusion suggests the need for a change in practice across countries—another chance to turn back the tide of too much medicine.

Involving patients

In line with our policies on patient and public involvement—part of our patient and public partnership strategy (bmj.com/campaign/patient-partnership)—both these sets of authors involved patients or parents in reaching their conclusions.

The panel that assessed the evidence on subclinical hypothyroidism included two people with lived experience of the condition. Among their contributions were the need for regular follow up of people not receiving treatment and a reminder that it's hard for patients to make decisions when they are feeling ill.

On head injury in children, the authors took to Twitter and found that, when given clear information on the balance of benefits and harms, most respondents opted for continued monitoring rather than an immediate scan. But the authors emphasise that, when the health of a real rather than hypothetical child is at stake, close consultation with the family is essential.

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