Stress and autoimmunity

Here’s another example of how difficult a concept “overdiagnosis” really is. It comes from a Swedish registry study linking a prior clinical coding for “stress related illness” with a subsequent coding for autoimmune disease. During a mean follow-up of 10 years, the incidence rate of autoimmune diseases was 9.1, 6.0, and 6.5 per 1000 person-years among the exposed, matched unexposed, and sibling cohorts, respectively. So roughly speaking, people who had a previous recorded diagnosis of a stress related illness had a third more diagnoses of autoimmune disease than those who had no such recorded history. So, can we conclude that stress increases the likelihood of autoimmune diseases? I would say not. Remember that this analysis is entirely about note entries, not systematic case finding. In retrospect, some of the “stress” diagnoses may represent a failure to consider autoimmune disease, corrected by testing later. Or, by contrast, some persisting “stress” symptoms may have caused doctors to look for autoimmune disease by sending off more blood tests. Either factor might explain a third more diagnoses, without any causal relation between stress and autoimmunity.

Tamsolusin helping stones through the ureter

Tamsolusin was an early example of a “take it in case it works” drug—an immensely lucrative category of drugs that do very little for most individuals but manage to reach a p-value for something if given to enough people. Mostly it’s used for men with prostatic symptoms. Pee-value: ha ha, yes, that was a joke. The other thing you can do with tamsolusin is give it to people writhing in the agonies of ureteric stone to “relax the ureter” and help the stone to pass. It’s a situation where “something must be done” and this was something to do (NB, a very common reason for overtreatment, possums). Here is a report of two placebo-controlled trials in which tamsolusin was compared with placebo for people suffering from small (less than 9 mm) stones in their ureters. Tamsolusin proved to be tamso-useless for helping more people pass their stones.

I have seen the robots and they might be non-inferior

“In patients with bladder cancer, robotic cystectomy was non-inferior to open cystectomy for 2-year progression-free survival. Increased adoption of robotic surgery in clinical practice should lead to future randomised trials to assess the true value of this surgical approach in patients with other cancer types.” Is this not putting the cart before the robotic horse? Are robots exempt from the general principle that you should test something thoroughly in a well designed trial before you let it loose on everybody? We could look to the Accelerated Access Collaborative. The stated purpose of this government-industry body is to ensure that “a number of the most promising products will be accelerated through the clinical development and NHS approval processes to treat conditions such as cancer, diabetes, and dementia.” Tell me, how does “accelerated” differ from “not properly tested”? Won’t the premature adoption of poorly tested devices simply waste NHS money and risk harm?

Subclinical overdiagnosis

I’ll be hosting an overdiagnosis conference this week and the journals seem to know it: there are several articles that perfectly illustrate the problem. This one is about subclinical hyperthyroidism. The overdiagnosis community regards “subclinical” as a warning: do enough tests, and we can all be subclinically something; eventually we realise that we are all subclinically dead. Our meeting is called POSSUM, standing for Preventing Overdiagnosis through the Shared Understanding of Medicine. But we will try to avoid preaching to the converted and focus instead on changing thinking habits among ourselves and those we try to help. One classic bad habit is to use a blood test to rule out something, and then, if it comes back abnormal, to interpret backwards from it. Sometimes I wish TSH (thyrotropin) testing had never been invented. You order the test for someone who is feeling tired all the time. But instead of coming back high, it comes back low. You repeat it in three months and it’s still low, whereas the serum free T4 levels are normal. So you don’t know what to do, and the patient is left thinking there’s something not quite right with her thyroid, but there’s nothing to be done about it. Then you repeat it in a year, and so it goes on. Judging from this review, nobody actually knows what do about “subclinical hyperthyroidism.” It’s a BADASS: biochemical abnormality of doubtful actual sense or significance.

Pee-value: ha ha, yes, that was a joke. The other thing you can do with tamsolusin is give it to people writhing in the agonies of ureteric stone to “relax the ureter” and help the stone to pass. It’s a situation where “something must be done” and this was something to do (NB, a very common reason for overtreatment, possums). Here is a report of two placebo-controlled trials in which tamsolusin was compared with placebo for people suffering from small (less than 9 mm) stones in their ureters. Tamsolusin proved to be tamso-useless for helping more people pass their stones.
GUIDELINES

Assessment and management of hearing loss in adults: summary of NICE guidance

Saoussen Ftouh, Katherine Harrop-Griffiths, Martin Harker, Kevin J Munro, Ted Leverton, on behalf of the Guideline Committee

Hearing loss is common—more than 9 million people in England have hearing loss and this is increasing with the ageing population (fig 1). Hearing loss ranks third for disease burden in England (years lived with disability). The average GP sees at least four patients every day who have hearing loss sufficient to interfere with their ability to communicate with ease.

Hearing loss is disabling—it influences communication at work and home, affecting educational attainment, employment opportunities, personal relationships, enjoyment of music, and social independence. It can lead to significant reduction in people’s quality of life and is associated with mental health problems including depression and dementia.

Hearing loss is expensive—the overall economic burden associated with hearing loss in adults in the UK is estimated to be more than £30bn per year.

Hearing loss can be managed successfully—early and effective intervention can minimise the impact of hearing loss on the individual and on his or her family.

The guideline covers adults (≥18 years old) with hearing loss, including those with onset before the age of 18 but presenting for the first time in adulthood. This includes acquired and late onset genetic hearing loss. It excludes adults who presented with hearing loss before the age of 18.

This article summarises the most recent recommendations from the National Institute for Health and Care Excellence (NICE) on the assessment and management of hearing loss in adults. It focuses on those areas of most relevance to primary and community care.

WHAT YOU NEED TO KNOW

- In those with sudden hearing loss, unilateral hearing loss with neurological signs, or otitis externa unresponsive to treatment in an immunocompromised patient offer immediate referral to ear, nose, and throat services (ENT) or accident and emergency department
- Early audiological assessment for suspected hearing loss is recommended. Be proactive and offer an audiological assessment if you suspect hearing loss in patients seeing you for other reasons; they may be unaware of their hearing loss
- Early fitting of bilateral hearing aids is cost effective and is recommended
- People with dementia, mild cognitive impairment, or learning difficulties should have regular hearing assessments
- Earwax: offer ear drops followed by irrigation or, where available, microsuction, to remove earwax. Ear drops can be used 15-30 minutes before ear irrigation to avoid unnecessary delay

Fig 1 | Estimated prevalence of people with hearing loss in the better hearing ear of ≥25 dB by age band in England
Recommendations

NICE recommendations are based on systematic reviews of best available evidence and explicit consideration of cost effectiveness. When minimal evidence is available, recommendations are based on the Guideline Committee’s experience and opinion of what constitutes good practice. Evidence levels for the recommendations are in the full version of this article on bmj.com.

How might a clinician in primary or community care manage a person presenting with hearing difficulties?

- For adults who present for the first time with hearing difficulties, or in whom you suspect hearing difficulties:
  - Exclude impacted wax and acute infections such as otitis externa, then
  - Refer to audiology services for an assessment and
  - Refer for additional medical assessment if needed (see infographic for details).

Most adults have hearing loss as a consequence of age or chronic noise exposure, which requires no further investigation of cause. A few will have hearing loss that requires additional medical assessment.

See below for timings and criteria for people needing immediate and urgent referral. See also box (right) of red flags particularly for clinically important referrals, and the infographic for information on people needing referral for medical care.

How quickly should people be referred for a specialist medical opinion?

Immediate referral (to be seen within 24 hours)

- Sudden hearing loss (occurring over a period of \(\leq 3\) days) within 30 days—Refer to ear, nose, and throat services (ENT) or emergency department.
- Acquired unilateral hearing loss with ipsilateral fifth or seventh cranial nerve symptoms and signs—Refer to ENT or, if stroke is suspected, follow local stroke referral pathway.
- Immunocompromised adults with hearing loss, otalgia, and otorrhoea unresponsive to treatment within 72 hours—Refer to ENT.

Urgent referral (to be seen within 2 weeks)

- Sudden hearing loss \(>30\) days ago—Refer to ENT or audiovestibular medicine services (AVM).
- Rapid onset hearing loss (occurring between 4 and 90 days)—Refer to ENT or AVM.
- Middle ear effusion not associated with an upper respiratory tract infection in people of Chinese or South East Asian family origin—Consider referral to ENT.

Offer proactive assessment of hearing in specific groups

- Because of a high incidence of hearing loss and poor ability to recognise hearing difficulties, consider referring for hearing assessment every two years:
  - Adults with diagnosed or suspected dementia or mild cognitive impairment.
  - Adults with diagnosed learning disability.

The average GP sees at least four patients every day who have hearing loss

RED FLAGS FOR REFERRAL FOR HEARING LOSS

- Sudden onset or rapidly progressive hearing loss
- Hearing loss and additional localising symptoms and signs
- Otalgia and otorrhoea in an immunocompromised patient
- Otorrhoea (not wax) from either ear that has not resolved, has not responded to prescribed treatment, or recurs
- A middle ear effusion unrelated to upper respiratory tract infections in a person of Chinese or South East Asian family origin (nasopharyngeal carcinoma is common in this ethnic group)
- Abnormal appearance of the ear canal or drum: polyp or squamous debris, posterior or superior perforation, mass, unexplained bleeding

Investigation using magnetic resonance imaging (MRI) for suspected vestibular schwannoma

MRI is the investigation of choice when there is concern about the possibility of a vestibular schwannoma or cerebellopontine angle (CPA) tumour. Request for scanning should occur after treatment for impacted earwax or acute infections to exclude the possibility of a temporary hearing loss.

- Offer MRI of the internal auditory meati to adults with hearing loss and localising symptoms or signs (such as facial nerve weakness, reduced sensation in the distribution of the trigeminal nerve, unilateral tinnitus) that might indicate a vestibular schwannoma or CPA lesion, irrespective of pure tone thresholds.
- Consider MRI of the internal auditory meati for adults with sensorineural hearing loss and no localising signs if there is an asymmetry on pure tone audiometry of 15 dB or more at any two adjacent test frequencies, using test frequencies of 0.5, 1, 2, 4, and 8 kHz.

How should earwax be managed?

- Offer to remove earwax for adults in primary care or community ear care services.
- Do not use manual ear syringing to remove earwax. This is inherently dangerous because of the high pressures that can be achieved, which can cause damage.
- Consider removing earwax by ear irrigation using an electronic irrigator, micsuction, or manual removal using a probe.
- If using electronic irrigation:
  - Use pre-treatment wax softeners, either immediately (water or sodium bicarbonate ear drops can be used 15-30 minutes before irrigation) or for up to five days beforehand.
  - Repeat once if needed before referral to a specialist ear care service or an ear, nose, and throat service for earwax removal.
How can clinicians ensure that people with hearing difficulties are able to participate in their care?
Enable people with hearing difficulties to actively participate in their care by, for example:
• Taking measures, such as reducing background noise, to ensure that the clinical and care environment is conducive to communication for people with hearing loss, particularly in group settings such as waiting rooms, clinics, and care homes.
• Establishing the most effective way of communicating with each person, including the use of hearing loop systems and other assistive listening devices.
• Ensuring that all healthcare staff are trained and have demonstrated competence in communication skills for people with hearing loss.

Assessment and management in audiology services
• The need for hearing intervention should not be based on a pure tone audiogram alone, but on a comprehensive assessment by an audiologist. After assessment, a personalised care plan should be discussed and shared.
• Different options for managing hearing needs should be discussed including personal hearing aids, listening devices for home, and hearing tactics.
• Offer hearing aids to adults whose hearing loss affects their ability to communicate and hear.
• Offer two hearing aids to adults with hearing loss in both ears if conversational speech can be amplified to a comfortable listening level in each ear.
• Offer adults a face-to-face audiology appointment 6-12 weeks after the hearing aids are fitted, with the option to attend this appointment by telephone or electronic communication if the patient prefers.
• Following hearing aid prescription and fitting, aftercare provided by a hearing health professional is important for continuing use of hearing aids.
• Audiology services should consider having a system in place for recalling people who use hearing devices for regular reassessment of their hearing needs and devices.

The economic burden associated with hearing loss in the UK is more than £30bn per year

Guidelines into practice
Do you, after excluding an acute and treatable cause, refer promptly those complaining of hearing difficulty for an audiological assessment at first presentation?
Is your practice deaf aware? Have all the practice staff had training, and demonstrated competence, in communication skills for people with hearing loss?
Are your patients able to get prompt and effective earwax removal?

A patient’s perspective from Ted Levertown

As a former GP, I welcome the guideline as a step to improving the primary care experience of people like me who have hearing loss:
• It will help GPs during around four consultations a day, and benefit their care of 70% of people in my age bracket.
• The clear statement on the clinical and cost effectiveness of early referral should lay to rest suggestions that GPs sometimes dissuade patients from being referred and getting hearing aids.
• Clinical commissioning groups now have clarity that I really can’t hear properly with only one hearing aid working.

Implementation

Most of the recommendations involve changes to practice requiring training and application. Local arrangements for prompt and effective earwax management may need review. The Guideline Committee noted the development of community-based ear care clinics and suggests further research into models of care. The committee is also aware that there will be an increase in demand for audiological services, but expects that reorganisation to provide more effective care will limit that burden. Better support and follow-up are likely to improve hearing aid use, which should reduce the need for repeat GP consultation as well as improve quality of life for many.

How patients were involved in the creation of this article

This NICE guideline committee had three members with moderately severe hearing loss who contributed significantly to the formulation of the recommendations summarised here. Two were lay members, and the third was a retired GP who is one of the authors of this article.

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Find the full version with references at http://dx.doi.org/10.1136/bmj.k2219
Hearing loss: triaged referral
Summary of NICE guidelines

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Possible causes</th>
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<tr>
<td><strong>Acquired unilateral hearing loss</strong></td>
<td>With ipsilateral fifth or seventh cranial nerve symptoms and signs</td>
</tr>
<tr>
<td><strong>Immunocompromised adults with hearing loss</strong></td>
<td>Otalgia and otorrhoea unresponsive to treatment within 72 hours</td>
</tr>
<tr>
<td><strong>Sudden sensorineural hearing loss</strong></td>
<td>Occurring over a period of 3 days or less</td>
</tr>
<tr>
<td><strong>Rapid-onset hearing loss</strong></td>
<td>Occurring between 4 and 90 days</td>
</tr>
<tr>
<td><strong>Chinese or south-east Asian family origin</strong></td>
<td>Middle ear effusion not associated with an upper respiratory tract infection</td>
</tr>
<tr>
<td><strong>Unilateral or asymmetric hearing loss</strong></td>
<td>Presents with obvious difference in hearing between the two ears</td>
</tr>
<tr>
<td><strong>Fluctuating hearing loss</strong></td>
<td>Not associated with an upper respiratory tract infection</td>
</tr>
<tr>
<td><strong>Hearing loss with hyperacusis</strong></td>
<td>Intolerance to everyday sounds that causes significant distress and affects a person’s day-to-day activities</td>
</tr>
<tr>
<td><strong>Hearing loss with persistent tinnitus</strong></td>
<td>Unilateral, pulsatile, has significantly changed in nature or is causing distress</td>
</tr>
<tr>
<td><strong>Hearing loss with vertigo</strong></td>
<td>Not fully resolved or recurrent</td>
</tr>
<tr>
<td><strong>Hearing loss that is not age related</strong></td>
<td>Any of the acquired causes mentioned above</td>
</tr>
<tr>
<td><strong>Hearing loss with partial or complete obstruction</strong></td>
<td>Obstruction of the external auditory canal prevents full examination of the eardrum or taking an aural impression</td>
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<tr>
<td><strong>Hearing loss with pain affecting either ear</strong></td>
<td>Lasting for 1 week or more and not responsive to first-line treatment</td>
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<tr>
<td><strong>Hearing loss with a history of discharge (other than wax)</strong></td>
<td>Not resolved, and not responsive to prescribed treatment or recurs</td>
</tr>
<tr>
<td><strong>Hearing loss with abnormal appearance of outer ear or eardrum</strong></td>
<td>Inflammation, Tumour, Swelling</td>
</tr>
<tr>
<td><strong>Hearing loss with a middle ear effusion</strong></td>
<td>In the absence of, or that persists after, an acute upper respiratory tract infection</td>
</tr>
</tbody>
</table>

**Immediate Referral**
To be seen within 24 hours
- ENT (ear, nose and throat service)
- If stroke suspected, follow local stroke referral pathway
- ENT (ear, nose and throat service)
- ENT (ear, nose and throat service)

**Urgent Referral**
To be seen within 2 weeks
- Refer to ENT or A&E depending on local referral pathways
- ENT (ear, nose and throat service)

**Routine Referral**
- ENT, A&E or specialist audiology service for diagnostic investigation using a local pathway
- ENT (ear, nose and throat service)

**External ear**
- Allergic rhinitis
- Acute otitis media
- Otitis externa
- Perforated ear drum

**Intercranial**
- Bilateral hearing loss
- Cerebral tumour
- Stroke
- Meningitis
- Nuchal or craniocervical meningitis
- Necrotising otitis externa
- Otitis media (chronic)
- Suppurative otitis media (chronic)

**Middle ear**
- Cholesteatoma
- Sinus infection
- Tonsillitis
- Nasal obstruction
- Tumour of nasopharynx

**Skull Base Osteomyelitis**
- Anterior inferior cerebellar artery stroke
- Tumour within cerebello-pontine angle
- Tumour within internal auditory canal or meatus
- Vestibular schwannoma
- Tumour of nasopharynx

**Hearing loss of unknown cause**
- To be seen within 2 weeks
- To be seen within 2 weeks
- ENT or A&E

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As the NHS turns 70 this week, here’s a look back at The BMJ’s issue on July 3, 1948, when the “National Health Service Act” was only two days away. To mark the beginning of this “momentous date in the history of British medicine” (Br Med J 1948;2:30), the journal invited Aneurin Bevan, the minister of health, to write a message to the medical profession (Br Med J 1948;2:1). Here is his letter in full:

“On July 5 we start, together, the new National Health Service. It has not had an altogether trouble free gestation! There have been understandable anxieties, inevitable in so great and novel an undertaking. Nor will there be overnight any miraculous removal of our more serious shortages of nurses and others, and of modern replanned buildings and equipment. But the sooner we start, the sooner we can try together to see to these things and to secure the improvements we all want.

“On July 5 there is no reason why the whole of the doctor-patient relationship should not be freed from what most of us feel should be irrelevant to it, the money factor, the collection of fees or thinking how to pay fees—an aspect of practice already distasteful to many practitioners. Yet it has been vital, if this is to be the new situation, to see that it did not carry with it either any discouragement of professional and scientific freedom or any unfair worsening of a doctor’s material livelihood. I sincerely hope and believe we have secured these things. If we have not we can easily put that right.

“The picture I have always visualised is one, not of “panel doctoring” for the less well-off, not of anything charitable or demeaning, but rather of a nation deciding to make healthcare easier and more effective by pooling its resources—each sharing the cost as he can through regular taxation and otherwise while he is well, and each able to use the resulting resources if and when he is ill. There is nothing of the social group or class in this; and I know you will be with me in seeing that there does not unintentionally grow up any kind of differentiation between those who use the new arrangements and those who, for any reason of their own, do not. Let this be a truly national effort. And I, for my part, can assure you that I shall want vigilantly to watch that your own intellectual and scientific freedom is never at risk of impairment by the background administrative framework, which has to be there for organising purposes, but in which your own active participation is already secure.

“In this comprehensive scheme—quite the most ambitious adventure in the care of national health that any country has seen—it will inevitably be you, and the other professions with you, on whom everything depends. My job is to give you all the facilities, resources, apparatus, and help I can, and then to leave you alone as professional men and women to use your skill and judgment as professional men and women to use your skill and judgment, without hindrance. Let us try to develop that partnership from now on.

“It remains only to wish you all good luck, relief—as experience of the scheme grows—from your lingering anxieties, and a sense of real professional opportunity. I wish you them all, most cordially.”
SPOT DIAGNOSIS
A traumatic wrist injury

A 38 year old motorcyclist presented to the emergency department after colliding with a car at speed. He had landed on his outstretched right hand and was complaining of a painful, swollen right wrist. Motor and sensory neurological function of the right radial, ulnar, and median nerves was intact. Radial pulse was palpable.

Based on the radiographs of his wrist (figure), what is the diagnosis?

Submitted by Philip Beak and Shamim Umarji
Patient consent obtained.

Cite this as: BMJ 2018;361:k2574

Fig 1
Anteroposterior (a) and lateral (b) radiographs of the wrist

Fig 2
Lateral radiograph of the wrist, with dislocated lunate highlighted

SPOT DIAGNOSIS
A traumatic wrist injury

The radiographs show volar dislocation of the wrist, with dislocated lunate. The lunate is a moon-shaped carpal bone of the wrist, which is involved in the formation of the capitohamate joint.

Clinical suspicion should be high if there is pain, swelling, and decreased range of motion of the wrist. The patient may also have difficulty in performing activities such as opening a bottle or tying a shoelace.

On the anteroposterior view of the wrist (figure), Gilula’s arcs are visible. These are curved lines that run along the proximal surfaces of the scaphoid, lunate, triquetrum, and pisiform (Arc I), the distal surfaces of the same four carpal bones (Arc II), and the proximal surfaces of the capitate and hamate (Arc III).

A break in Gilula’s arcs may indicate a bony or ligamentous injury at the site of disruption. Bony injury is indicated by the presence of cortical disruption (fracture) or dislocation. Widening of normal spaces between bones indicates ligamentous injury. Clinical suspicion of either bony or ligamentous injury without clear radiographic evidence warrants further imaging, such as magnetic resonance imaging.

Clinical suspicion should be very high for lunate dislocation, as up to 25% are missed on initial presentation. If this injury is not identified, patients can develop chronic and progressive arthritis, decreased range of motion, and joint dysfunction. The median nerve is the most commonly compromised structure (median nerve compromise is present in up to 45% of cases). When the median nerve is affected, sensory deficit is usually noted rather than motor deficit. There will be reduced sensation over the palmar tip of the index finger when compared with the contralateral side. If the motor component is affected, the patient will not be able to cross fingers easily because of the weakened grip.

Urgent closed reduction should be attempted to restore anatomical alignment. After operative fixation, patients often experience reduced grip strength and pain, with decreased range of motion and joint dysfunction. The median nerve is the most commonly compromised structure (median nerve compromise is present in up to 45% of cases). When the median nerve is affected, sensory deficit is usually noted rather than motor deficit. There will be reduced sensation over the palmar tip of the index finger when compared with the contralateral side. If the motor component is affected, the patient will not be able to cross fingers easily because of the weakened grip.

Surgical treatment is the definitive management for this injury. Urgent closed reduction should be attempted to restore anatomical alignment. After operative fixation, patients often experience reduced grip strength and pain, with decreased range of motion and joint dysfunction. The median nerve is the most commonly compromised structure (median nerve compromise is present in up to 45% of cases). When the median nerve is affected, sensory deficit is usually noted rather than motor deficit. There will be reduced sensation over the palmar tip of the index finger when compared with the contralateral side. If the motor component is affected, the patient will not be able to cross fingers easily because of the weakened grip.
What lice beneath

A 17 year old boy with no previous history of skin disease was admitted to the medical ward with facial swelling and a widespread itchy, erythematous, papular rash (fig 1). Close examination revealed extensive head lice infestation (fig 2). Treatment of the scalp with topical malathion insecticide resulted in resolution of all symptoms.

This is a florid example of an “id” reaction (also known as disseminated secondary eczema, autoeczematisation, or an autosensitisation reaction). Id reactions are acute generalised cutaneous reactions that develop in response to a primary infectious or inflammatory (usually localised) skin condition. Common triggers include acute hand dermatitis, stasis eczema, molluscum contagiosum, and tinea pedis. The cause is unclear but is thought to be an immunological response to circulating antigens.¹

Treatment of the primary skin condition should lead to resolution of the id reaction, but topical steroids and emollients can also provide symptomatic relief.
Tina M Tian; Brigid M Daly; Caroline M Owen, Department of Dermatology, Royal Blackburn Hospital, East Lancashire Hospitals NHS Trust

Cite this as: BMJ 2018;361:k2599

Lithium in the water

Years ago, there was anxiety that aluminium, which is present at low concentrations in some drinking waters, might be a cause of Alzheimer’s disease. The idea fizzled out, but the story seemed to be repeating itself with another metal, lithium, where a few studies have reported links between higher concentrations in water and lower rates of mental health disorders. Minerva suspects that this won’t come to much either. In the United States, a systematic investigation of a geographical relation between groundwater lithium concentrations and diagnoses of bipolar disorder and dementia in the United States found no supporting evidence (JAMA Psychiatry).

Glasgow coma scale

Introduced in 1974, the Glasgow Coma Scale rapidly proved its worth as a way of communicating information about level of consciousness in patients with an acute brain injury. But it’s not perfect because it’s rather complicated, takes a while to calculate and has a disappointingly low inter-rater reliability. A large study shows that a much simpler evaluation — does the patient follow commands? — performs well for triage of trauma patients in out-of-hospital settings (Ann Emerg Med).

This simple binary assessment was as good at predicting outcomes as a GCS score of 13 or less.

One pill for hypertension

Most people with hypertension need more than one drug to achieve satisfactory control of blood pressure. A retrospective study from Ontario, Canada asks whether it’s better to give these drugs combined in a single pill, or as multiple individual drugs. The answer is clearly in favour of the former (PLoS Med). A composite outcome of death or hospital admission for heart attack, heart failure, or stroke was roughly 10% less likely in people who received single-pill combinations. The difference was largely explained by better adherence to treatment.

Menopause and cognition

Data from more than 1300 women taking part in a British birth cohort study who had tests of cognitive function on 4 occasions between the ages of 43 and 69 suggest that having a later menopause brings long term benefits for verbal memory (Neurology). Whether this means that oestrogens play a role in maintenance of cognitive function is another matter. The effect of a later menopause was fairly small, and it became smaller still after adjustment for potential confounders such as cognitive ability in childhood. Nor were there any benefits for other domains of cognition.

Diphtheria, tetanus, and acellular pertussis vaccine

No news is often good news and this was certainly true in a study of adverse event reports after vaccination in children in the US. Despite using empirical Bayesian data mining techniques to sift 27 years’ worth of data about adverse events following the administration of diphtheria-tetanus-acellular pertussis vaccine, the investigators failed to identify any new or unexpected problems. The most frequently reported events were erythema and swelling at the injection site, and pyrexia—but of course these have been known about for years (Paediatrics).

Biological therapies and breast feeding

A study of 72 women with inflammatory bowel disease receiving biological therapies (mainly infliximab and adalimumab) who were also breast feeding their babies reports that low concentrations of these agents can be detected in breast milk samples, particularly in the first few days following the infusion of the drug (J Gastroenterol). However, the babies seemed unaffected and their infection rates and developmental milestones were no different from those of babies of mothers receiving conventional treatment. The study isn’t really large enough to settle the matter, but it looks as if biological therapies may be compatible with breast feeding.

Cite this as: BMJ 2018;361:k2742