

WHITE MATTER AND AGEING

Osteoarthritis and protection from global functional decline

Inzitari and colleagues describe the association between white matter changes in older patients and subsequent functional decline.¹ Their findings show that new occult markers of disease may exist and reinforce some of the intuition of clinicians dealing with elderly patients, raising some interesting issues.

Firstly, although education conferred a protective effect on subsequent decline, the presence of osteoarthritis conferred stronger protection than a year of education, even when adjusted for other risk factors. The anti-inflammatory effect from the concomitant use of non-steroidal anti-inflammatory drugs (NSAIDs) may have conferred some benefit. NSAIDs selective for cyclo-oxygenase-2 (COX 2 inhibitors) increase cardiovascular risk,² but the evidence of harm from non-selective NSAIDs is limited.³ Indeed, some beneficial effects of non-selective NSAIDs on cognitive decline, albeit contended, have been noted.⁴ Were data on drug treatment collected? If so, was NSAID use or class of NSAID associated with progression to death or disability? Issues of statistical power may preclude a definitive answer to this question.

Secondly, if white matter changes contribute independently to morbidity, as this study suggests, did the burden of white matter disease correlate with incident delirium in the study population? Such a finding would help to explain the comparatively high rates of delirium in older patients previously considered to be cognitively intact.⁵

Finally, the composite rate of transition to disability or death of 15.8 per 100 person years shows that older patients who seek medical attention—despite presenting as non-disabled—carry a high risk of progression to an unfavourable outcome. This should inform the practice of geriatricians and general physicians alike when dealing with older people in an increasingly rationed environment.

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- 1 Inzitari D, Pracucci G, Poggesi A, Carlucci G, Barkhoff F, Chabriat H, et al. Changes in white matter as determinant of global functional decline in older independent outpatients: three year follow-up of LADIS (leukoaraiosis and disability) study cohort. *BMJ* 2009;339:b2477. (6 July.)

- 2 Fosbol EL, Gislason GH, Jacobsen S, Folke F, Hansen ML, Schramm TK, et al. Risk of myocardial infarction and death associated with the use of nonsteroidal anti-inflammatory drugs (NSAIDs) among healthy individuals: a nationwide cohort study. *Clin Pharmacol Ther* 2009;85:190-7.
- 3 Roumie CL, Mitchell EF, Jr, Kaltenbach L, Arbogast PG, Gideon P, Griffin MR. Nonaspirin NSAIDs, cyclooxygenase 2 inhibitors, and the risk for stroke. *Stroke* 2008;39:2037-45.
- 4 Rogers J, Sabbagh MN. Interactions of stroke, nonsteroidal anti-inflammatory drugs, and APOE status in dementia risk. *Neurology* 2008;70:5-6.
- 5 Siddiqi N, House AO, Holmes JD. Occurrence and outcome of delirium in medical in-patients: a systematic literature review. *Age Ageing* 2006;35:350-64.

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A/H1N1 PANDEMIC

Case definition is too loose

The inpatient infectious diseases ward of the 1000 bed James Cook University Hospital in Middlesbrough has been designated for treatment and isolation of all patients admitted with confirmed or suspected swine flu.¹

Up to 29 July 2009, 28 such patients had been admitted to the ward. They all had viral throat swabs taken. Only two had positive swabs for H1N1 virus (table).

Diagnoses in 28 patients admitted to isolation ward with suspected swine flu

Diagnosis	No of patients
Swine flu	2
Adenovirus	1
Asthma exacerbation	1
Bronchiectasis exacerbation	1
Gastritis	1
Hyperemesis gravidarum	1
Meningioma (presented with headaches)	1
Meningitis (herpes simplex)	1
Meningitis (meningococcal)	1
Neutropenic sepsis	1
Peritonitis	1
Pneumonia (community acquired)	3
Pneumonia (pneumococcal)	2
Primary hyperparathyroidism (presented with muscle aches)	1
<i>Staphylococcus aureus</i> bacteraemia	1
Tonsillitis	1
Viral infection	6
Other (admitted for another reason and thought to have swine flu)	2

The current case definition of A/H1N1 flu is so non-specific that its use without a clinician assessment is likely to lead to many clinically significant diagnoses being missed with the risk of increased morbidity and mortality.

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- 1 Anderson RM. How well are we managing the influenza A/H1N1 pandemic in the UK? *BMJ* 2009;339:b2897. (15 July.)

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QUININE FOR MALARIA IN CHILDREN

Increasing adherence to quinine

Achan and colleagues show that increasing access to artemisin based combination treatments will allow most Africans with uncomplicated malaria to be treated promptly with these effective medicines,¹ but caution is required when extrapolating their findings.

They studied Ugandan children aged 6 to 59 months, and one of the shortcomings of the quinine treatment was poor adherence to treatment. This might be owing to the bitter taste of quinine, and compliance may be better among older children or adults.

The quinine sulphate formulation was certified by the Uganda National Drug Authority, but which quality checks were performed is unclear. In their study of antimalarial drug quality in Africa, Amin and Kokwaro found that quinine formulations often passed the content test but failed the dissolution test.² As quinine sulphate is only sparingly soluble in water,³ it may be especially problematic in small children with short gastrointestinal transit times.

Other quinine salts may be preferable: from their small bioavailability study in adults Jamaludin et al recommend the ethyl carbonate salt for use in paediatric patients because of its neutral taste.⁴

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- 1 Achan J, Tibenderana JK, Kyabayinze D, Wabwire Mangeri F, Kanya MR, et al. Effectiveness of quinine versus arthemether-lumefantrine for treating uncomplicated falciparum malaria in Ugandan children: randomised trial. *BMJ* 2009;338:b2763. (21 July.)
- 2 Amin AA, Kokwaro GO. Antimalarial drug quality in Africa. *J Clin Pharm Ther* 2007;32:429-40.
- 3 Quinine. In: Sweetman S, ed. *Martindale: The complete drug reference*. London: Pharmaceutical Press, 2009. www.medicinescomplete.com/mc/martindale/2007/ms-1398-j.htm
- 4 Jamaludin A, Mohamad M, Navaratnam V, Selliah K, Tan SC, Wernsdorfer WH, et al. Relative bioavailability of the hydrochloride, sulphate and ethyl carbonate salts of quinine. *Br J Clin Pharmacol* 1988;25:261-3.

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ANTI-HISTAMINES FOR ANAPHYLAXIS?

Primary outcome measures

Andreae and Andreae recommend that future trials of antihistamines in anaphylaxis should use a primary outcome of “whether antihistamines result in reduced mortality.”¹

Given that death from anaphylaxis is rare, and that fewer than half of deaths from anaphylaxis occur before reaching emergency medical care, this outcome is not useful.

Perhaps we should first establish, using prospective observational studies in both hospital and community settings, the clinical outcomes with a simple protocol of supportive care including adrenaline and fluid resuscitation.

The results of such studies may remove the need for a clinical trial of antihistamines. Alternatively, they may suggest alternative, clinically relevant primary outcomes for a placebo controlled trial of antihistamines—for example, the incidence of adverse effects or delayed phase (“biphasic”) reactions, or both.

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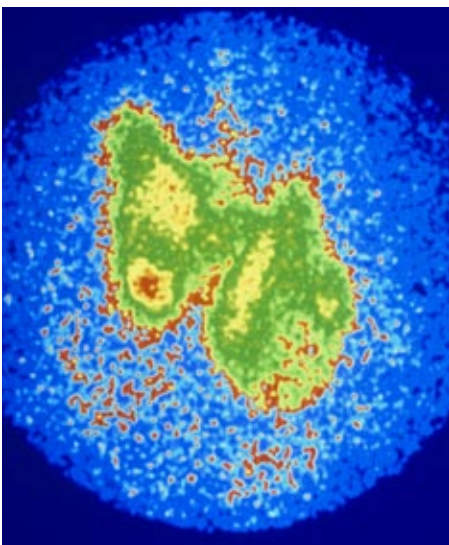
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1 Andreae DA, Andreae MH. Should antihistamines be used to treat anaphylaxis? *BMJ* 2009;339:b2489. (10 July.)

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THYROID SWELLINGS

Nodules and hyperthyroidism



Hatton and colleagues say that nodules in hyperthyroid patients are unlikely to be malignant, suggesting that no further investigation is required if thyroid function tests indicate hyperthyroidism.¹ However, the presence of a solitary or dominant thyroid nodule in a patient with biochemical evidence

of hyperthyroidism is one of the few remaining indications for isotope scanning of the thyroid.

An autonomous “hot” nodule is indeed unlikely to be malignant, and fine needle aspiration is not indicated. However, if the patient has one nodule, others may (and often will) be present. If thyroid stimulating hormone is suppressed, you need to be sure that the palpable nodule is suppressing it: an impalpable hot nodule may exist elsewhere in the gland, and the presenting lesion may be cold and require fine needle aspiration.

To summarise, in euthyroid patients, isotope scanning to characterise nodules is not indicated because they will either be cold or warm, which has no clinically significant implication for the presence or absence of malignancy. If thyroid stimulating hormone is suppressed (a comparatively uncommon finding), scanning is indicated to ensure that the palpable nodule is hot.

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1 Hatton R, Patel M, Devendra D. Thyroid swellings. *BMJ* 2009;339:b2563. (13 July.)

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Thyroid cancer and the young

Hatton and colleagues state that thyroid swellings are more likely to be malignant in patients over 65.¹ However, thyroid cancer is not rare in younger age groups. Indeed, standard endocrine practice is to regard patients under 20 as having an increased clinical suspicion of malignancy when they present with a thyroid nodule.² In terms of rate of growth, suddenly enlarging and painful thyroid nodules are usually benign, but aggressive thyroid cancers may occasionally be associated with both sudden growth and pain.

Patients with palpable thyroid nodules with normal thyroid function tests should indeed be referred to a specialist service.¹

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1 Hatton R, Patel M, Devendra D. Thyroid swellings. *BMJ* 2009;339:b2563. (13 July.)

2 British Thyroid Association, Royal College of Physicians. Guidelines for the management of thyroid cancer. 2007. www.british-thyroid-association.org/news/Docs/Thyroid_cancer_guidelines_2007.pdf

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BRITISH PAIN SOCIETY MANOEUVRES

Why the desperation?

The recent ousting of Professor Paul Watson from the presidency of the British Pain Society by a selection of society members characterised by their allegiance to injections of therapeutic

substances into the back for non-specific low back pain,¹ seems a desperate, ill targeted, and rather illogical response to what must be disappointing news.

One might expect an organised and coherent representation from that group of practitioners, and for it to be delivered through appropriate channels. One might hope for a belated enthusiasm for undertaking the studies to collect evidence in support of their allegiance. One might dream of impassioned vigour in establishing collaborative teams of passionate clinicians and pragmatic researchers to pursue the truth about injections of therapeutic substances into the back for non-specific low back pain. Instead, the chosen response seems to have been an organised and targeted personal attack on one member of the group from the National Institute for Health and Clinical Excellence (NICE), implemented by exploitation of the legally binding mechanisms of the British Pain Society.

By taking this response, the society as a whole has been dragged down. From that it should recover, but the damage to the instigators may be harder to overcome. As the world watches the impact of these desperate measures unfold (for the world is watching), we find ourselves asking why, for this selection of society members, are these such desperate times?

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1 Rawlins M, Littlejohns P. NICE outraged by ousting of pain society president. *BMJ* 2009;339:b3028. (28 July.)

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MAKING TRIAL DATA PUBLIC

Astronomical data lead the way

Astronomers have been making their raw data publicly available for some time, after a suitable delay to enable those who came up with the idea (and the funding) to perform the first analyses. For example, one organisation releases data to the public 18 months after archiving.¹ Perhaps a suitable time for release of data held by pharmaceutical companies would be shortly after the patent for the drug has expired.²

Secrecy might produce short term gains, but in the longer run it can only hinder progress.

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1 UKIDSS. The UKIRT Infrared Deep Sky Survey. www.ukidss.org/

2 Smyth RL. Making information about clinical trials publicly available. *BMJ* 2009;338:b2473. (25 June.)

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