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LETTERS

CAUDA EQUINA SYNDROME

Examination must be thorough

As well as neurological examination of the legs, perianal and perineal sensation should be assessed in cases of suspected cauda equina syndrome.[1] This may prove challenging in primary care settings, but it is the safest way of appropriately triaging such patients, facilitates referral, and provides a baseline for specialist doctors. Examination of perianal and perineal sensation and of the anal sphincter is intimate and potentially unpleasant, but if a doctor explains why a complete examination is important, few patients would refuse. The same examination will be repeated by the specialist team, but this is not a good enough reason for not examining the patient in general practice or in an emergency department because evolving neurological signs may be missed.

Examining both the perianal and perineal areas has been part of our standard assessment of such patients. Perineal hypoaesthesia/anaesthesia may be a predictor of a poor outcome.[2] Indeed, complete perineal anaesthesia and significant sphincter dysfunction (inability to control micturition or defaecation, or both) were univariate and multivariate predictors of a poor overall outcome.[2]

The timing of surgery for cauda equina compression remains controversial. However, we believe that these controversies should not distract primary care and emergency doctors from the task of carrying out a focused yet complete clinical assessment and referring to a specialist team in a timely manner.

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1 Lavy C, James A, Wilson-MacDonald J, Fairbank J. Cauda equina syndrome. *BMJ* 2009;338:b936. (31 March.)
2 Kennedy JG, Soffe KE, McGrath A, Stephens MM, Walsh MG, McManus F. Predictors of outcome in cauda equina syndrome. *Eur Spine J* 1999;8:317-22.

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Urinary retention

Lavy and colleagues do not mention that urinary retention in cauda equina syndrome is painless because the bladder is totally denervated.[1] Once the bladder reaches maximum capacity, urine will dribble out as overflow incontinence, which patients will also not feel. Painless urinary retention is the cardinal sign of the syndrome[2 3]: without it there is only a 1 in 1000 chance of its presence.[4]

Any patient in whom cauda equina syndrome is suspected should have at least post-micturition bladder scanning or urinary catheterisation. A painless residual volume of 750-1000 ml has a 90% specificity for the syndrome.[4] Since many of these patients have chronic back pain, they will usually be taking regular codeine (at least) and will be constipated. Constipation (along with pain) can also result in urinary retention, but the residual volume will be less since the bladder is not atonic. The S2/3/4 sensory supply can be tested by asking patients whether they can feel discomfort on gentle traction of a urinary catheter with the balloon inflated.

Most patients do not realise that they are in urinary retention and overflow incontinence until mid-morning or lunchtime, when they present to accident and emergency. Four hours later they are referred to a specialist with the usual plea that magnetic resonance imaging cannot be performed at 4.45 pm. Neurosurgeons often have to decide which patients to perform an out of hours scan on (if it is available) on the basis of a telephone referral. Evolving cauda equina syndrome (diagnosed from the history) is a surgical emergency but fixed cauda equina syndrome (fixed for 48 hours) can usually wait.

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Competing interests: None declared.

1 Lavy C, James A, Wilson-MacDonald J, Fairbank J. Cauda equina syndrome. *BMJ* 2009;338:b936. (31 March.)
2 Kostuik JP, Harrington I, Alexander D, Rand W, Evans D. Cauda equina syndrome and lumbar disc herniation. *J Bone Joint Surg Am* 1986;68:386-91.
3 O'Laoire SA, Crockard HA, Thomas DG. Prognosis for sphincter recovery after operation for cauda equina compression owing to lumbar disc prolapse. *BMJ* 1981;282:1852-4.
4 Greenberg M. *Handbook of neurosurgery*. 6th ed. New York: Thieme, 2006.

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Specialist rehabilitation

Lavy and colleagues note that recovery from cauda equina syndrome may often be incomplete.[1] Patients may continue to experience problems with sexuality and continence dysfunction, neuropathic pain, mobility limitations, and adjustment.

Patients with cauda equina syndrome who have any persisting symptoms postoperatively should be referred to a rehabilitation consultation to assist with planning the best ongoing care.[2] In the early period, care is crucial to prevent suboptimal management of bladder dysfunction. This can sometimes be difficult to fully appreciate as patients may partially void but still have a large residual urine volume, which can compromise bladder recovery and predispose to urinary tract infections.[3] Steps must also be taken to prevent pressure ulcers, which may have devastating consequences.[4]

Longstanding best practice in most developed countries is to refer patients with spinal cord injury to a specialist rehabilitation unit.[5] There, patients have the best chance of optimal management of persisting deficits and returning to the highest level of functioning, even if the neurological recovery is incomplete.

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1 Lavy C, James A, Wilson-MacDonald J, Fairbank J. Cauda equina syndrome. *BMJ* 2009;338:b936. (31 March.)
2 New PW. The assessment and selection of potential rehabilitation patients in acute hospitals: a literature review and commentary. *Open Rehabilitation Journal* 2009;2:24-34.
3 Vaidyanathan S, Soni BM, Hughes P, Bingley J, Singh G, Sett P. Massive distension of urinary bladder in a patient with cervical spinal cord injury who was treated initially in a general hospital. *Spinal Cord* 2001;39:189-91.
4 Consortium for Spinal Cord Medicine Clinical Practice Guidelines. Pressure ulcer prevention and treatment following spinal cord injury: a clinical practice guideline for health-care professionals. *J Spinal Cord Med* 2001;24(suppl 1):S40-101.
5 Guttmann L. Spinal cord injuries. *Comprehensive management and research*. 2nd ed. Oxford: Blackwell Scientific Publications, 1976.

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SURGERY FOR BREAST CANCER

Oncoplastic surgery is promising

Improving cosmetic outcome is secondary to achieving thorough tumour excision,[1] but new techniques in oncoplastic surgery are making both goals possible.

The oncological superiority of quadrantectomy over lumpectomy has been confirmed by level 1 evidence,[2] but cosmetic deformity after quadrantectomy is common and distressing. For this reason, many women facing such extensive resections are advised to undergo mastectomy. But one of the key goals of oncoplastic surgery is to avoid mastectomy by simultaneously reconstructing these large defects. Skin sparing mastectomy is a good example of a procedure which has become standard care, although it has never been compared with conventional skin sacrificing mastectomy in a randomised controlled trial.

Early reports confirm the oncological safety of these techniques.[3] The National Mastectomy and Breast Reconstruction Audit of >10 000 women in England is to be published later this year (www.ic.nhs.uk/mbr).

A strong collaborative partnership between the Association of Breast Surgery and the British Association of Plastic, Reconstructive and Aesthetic Surgeons has produced comprehensive guidelines defining the quality standards for multidisciplinary teams delivering oncoplastic breast services.[4] More than 60 UK trainees from a background of general and plastic surgery have completed centrally funded 12 month oncoplastic fellowships since 2002, and many are practising as consultant oncoplastic breast surgeons in multidisciplinary teams. Similar fellowships have been established in other European centres, but fellowships in the US still provide few opportunities for residents to aquire skills.

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1 Morrow M. Minimally invasive surgery for breast cancer. *BMJ* 2009;338:b557. (19 February.)
2 Veronesi U, Volterrani F, Louini A, et al. Quadrantectomy versus lumpectomy for small size breast cancer. *Eur J Cancer* 1990;26:671-3.
3 Rusby JE, Paramanathan N, Laws SAM, Rainsbury RM. Immediate latissimus dorsi miniflap volume replacement for partial mastectomy: use of intra-operative frozen sections to confirm negative margins. *Am J Surg* 2008;196:512-8.
4 Association of Breast Surgery at BASO, Association of Breast Surgery at BAPRAS, Training Interface Group in Breast Surgery, et al. Oncoplastic breast surgery: a guide to good practice. *Eur J Surg Oncol* 2007;33(suppl 1):S1-23.

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GETTY IMAGES

STANDARDISED MORTALITY RATIOS

Monitoring mortality

Mohammed and colleagues suggest that hospital standardised mortality ratios are prone to the "constant risk fallacy" and that the use of certain variables (the Charlson comorbidity index and emergency admission) for the case mix adjustment model is "unsafe."[1 2]

They focus on at least two mechanisms that might contribute to this constant risk fallacy: differential measurement error, and inconsistent proxy measures of risk. Certainly, measurement error, including poor coding, will have an impact on the ratios. However, it is the extent to which they are affected which is important. The paper gives a hypothetical example of how differential measurement error can distort a standardised mortality ratio. This is an extreme example based on artificial data.

We calculated 2007-8 hospital standardised mortality ratios with and without adjustment for comorbidity (using the Charlson index) for each of the four hospitals in the paper and found that they changed by less than 3%. The authors argue that, because the trust with the highest mean Charlson score has the lowest mean length of stay, emergency readmission rate, and crude mortality rate of the four, the Charlson score does not reflect case mix but simply quality of coding. Further analysis reveals, however, that this higher mean Charlson score is due to 35% of their hospital standardised ratio admissions being for cancer, compared with between 9% and 25% for the other three hospitals. The Charlson score can only partially describe a hospital's case mix, which explains why it may not always correlate well with outcome measures.

The paper argues that the large variations in proportions of emergency/non-emergency patients with zero length of stay indicate that systematically different admission policies were being adopted across hospitals. We are not sure their data show this, as their data also show large variation across the three years in the same hospital.

Their calculations (table 2) also seem to include day cases, which explains the low crude death rates and mean length of stay and affects the proportion of admissions that are emergencies. In any case, the variation in risk can be interpreted in two ways: either as bias or as real differences in risk between hospitals. Mid Staffordshire, one of the hospital trusts in the paper, has been severely criticised by the Healthcare Commission, which outlined serious concerns about the "appalling" emergency care in the trust.[3] The report stated that there were deficiencies at "virtually every stage" in the care of people admitted as emergencies and concluded that the trust supplied insufficient evidence to support its claim that the apparent high mortality could be explained as a problem with the coding of data.

Under competing interests Mohammed and colleagues state "None declared." We note, however, that several members of the steering committee represent the hospitals included in the study, and these people may have potential conflicts of interest. The medical director and the information manager from Mid Staffordshire General Hospitals were both on the paper's steering committee.

In conclusion, we would agree that that the hospital standardised mortality ratio could potentially be affected by several factors, including data quality, admission thresholds, discharge strategies, and underlying levels of morbidity in the population, but we maintain that quality of care must also be considered as a contributing factor.

When a hospital has a high standardised mortality ratio, then further investigation is merited to exclude or identify quality of care issues. Hospitals that have taken this approach in the US, UK, and other countries have gained a useful insight into mortality at their institution, and this has been associated with documented falls in mortality.[4 5] Such a reduction in mortality rates can only be good for patients.

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1 Mohammed MA, Deeks JJ, Girling A, Rudge G, Carmalt M, Stevens AJ, Lilford RJ. Evidence of methodological bias in hospital standardised mortality ratios: retrospective database study of English hospitals. *BMJ* 2009;338:b780. (18 March.)

2 Nicholl J. Case-mix adjustment in non-randomised observational evaluations: the constant risk fallacy. *J Epidemiol Community Health* 2007;61:1010-3.
3 Healthcare Commission. *Investigation into Mid Staffordshire NHS Foundation Trust*. London: Healthcare Commission, 2009. Available at: www.cqc.org.uk/_db/_documents/Investigation_into_Mid_Staffordshire_NHS_Foundation_Trust.pdf
4 Wright J, Dugdale B, Hammond I, Jarman B, Neary M, et al. Learning from death: a hospital mortality reduction programme. *J R Soc Med* 2006;99:303-8.
5 Jarman B, Bottle A, Aylin P, Browne M. Monitoring changes in hospital standardised mortality ratios. *BMJ* 2005;330:329.
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Methodological bias

Mohammed and colleagues say that the Healthcare Commission is provoked into a reaction by high hospital standardised mortality ratios.[1] The commission has a process for responding to high mortality alerts within acute NHS trusts, but the hospital standardised mortality ratio is not a part of it. Instead, we focus on alerts in specific clinical groups: some raised by our scanning methods and others sent to us by the Dr Foster Unit at Imperial College London.[2] We use a structured approach to identify and respond to the alerts using a combination of our own data, statistical analysis, and local intelligence. Our analysis tests whether they can be explained as, for example, artefacts of coding or case mix. If we cannot close a case down internally, we will start a dialogue with the trust concerned but only, in the first instance, for fact finding—the trust itself might be able to provide the assurance we need that there are no concerns.

If we have multiple concerns for the same hospital from several groups of patients, we assess mortality for wider groups of patients to look for indications of systemic problems. Again, these measures need to be interrogated for reliability as with the individual mortality alerts. Such analysis was carried out for our investigation of Mid Staffordshire NHS Foundation Trust,[3] but it was not the trigger that led to our initial correspondence with the trust.

As a national health service regulator, we will be very concerned if, as a result of this paper, hospitals adopt the view that high mortality rates do not merit serious attention.

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1 Mohammed MA, Deeks JJ, Girling A, Rudge G, Carmalt M, Stevens AJ, Lilford RJ. Evidence of methodological bias in hospital standardised mortality ratios: retrospective database study of English hospitals. *BMJ* 2009;338:b780. (18 March.)
2 Healthcare Commission. *Following up mortality "outliers": a review of the programme for taking action where data suggest there may be serious concerns about the safety of patients*. London: Healthcare Commission, 2009. Available at: www.healthcarecommission.org.uk/_db/_documents/Following_up_mortality_outliers.pdf
3 Healthcare Commission. *Investigation into Mid Staffordshire NHS Foundation Trust*. London: Healthcare Commission, 2009. Available at: www.healthcarecommission.org.uk/_db/_documents/Investigation_into_Mid_Staffordshire_NHS_Foundation_Trust.pdf
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Authors' reply

We are very encouraged that our work has now led Aylin and colleagues to agree that hospital standardised mortality ratios "could potentially be affected by several factors, including data quality, admission thresholds, discharge strategies, and underlying levels of morbidity in the population." Dr Foster must publish these caveats alongside its hospital standardised mortality ratios. Such caveats will also counter the popular misconception that hospital standardised mortality ratios measure the number of avoidable deaths. And while Sherlaw-Johnson and colleagues suggest that high hospital standardised mortality ratios do not provoke the regulator to react, this is not the public perception. In the *Sunday Telegraph* Anthony Halperin, chairman of the Patients' Association, states "that all the trusts with higher death rates than expected should be investigated,"[1] and such pressure is growing.[2]

Aylin and colleagues cite the Healthcare Commission's report into Mid Staffordshire NHS Foundation Trust Hospital as evidence of a link between hospital standardised mortality ratios and quality of care. We do not claim that there is no link, rather we argue, on the basis of systematic review evidence[3] and our paper, that the link is unreliable. The Healthcare Commission's most serious concerns about risk to patients at Mid Staffordshire Hospital were in May 2008, when the Dr Foster hospital standardised mortality ratio was 105 and falling.

We share the concern about standards of patient care and the need for robust methods to assess this, but this does not mean that an unreliable hospital standardised mortality ratio is acceptable—on the contrary, an unreliable ratio has the potential to mislead in any direction. So, while hospitals with high ratios are often the focus of attention we question the extent to which hospitals and other stakeholders can take comfort from low ratios.

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Competing interests: None declared.

1 Smith R. Hospital deaths are a postcode lottery. *Sunday Telegraph* 2008 March 26. www.telegraph.co.uk/news/uknews/1582715/Hospital-deaths-are-a-postcode-lottery.html
2 Jamieson A. Ten NHS trusts have worse death rates than "shocking" Mid Staffordshire. *Daily Telegraph* 2009 March 29. www.telegraph.co.uk/health/heal-our-hospitals/5066552/Ten-NHS-trusts-have-worse-death-rates-than-shocking-Mid-Staffordshire.html
3 Pitches D, Mohammed MA, Lilford R. What is the empirical evidence that hospitals with higher-risk adjusted mortality rates provide poorer quality of care? A systematic review of the literature. *BMC Health Serv Res* 2007;7:91
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DEATH CERTIFICATION

Investigation of death is set to improve at last

Reisner's complaints after his mother's death are unfortunately well known.[1] The Royal College of Pathologists has long argued the need for reform of systems for investigating and certifying death, as have a succession of government reports over many years. The long awaited Coroners and Justice Bill, currently making its way through parliament, should produce an improvement in the processes.

Reisner complained that the pathologist should have had better information than that provided by the police, and we at the royal college have argued that the supply of information to pathologists by coroner's officers should specifically be improved. We have investigated and publicised problems in providing high quality postmortem examinations.[2] Currently, coroner's postmortem examinations are undertaken in an unsatisfactory contractual position, somewhere between NHS work and private practice but with few of the benefits of either. As a result, many histopathologists are now refusing to undertake the work, leaving those who continue struggling to complete far too many cases in insufficient time, outside the time of their contracted NHS duties. We have compiled evidence of the problems[3] and are currently discussing with the Ministry of Justice how the situation can be improved. We believe that the state should be requiring fewer coroner's postmortem examinations, but to a higher standard.

Reisner described a personal tragedy, but my colleagues would expect me to point out that the title of the personal view reinforces the public stereotype of pathologists. Pathology is the study of disease, and most of the work of pathologists relates to diagnosing and treating living people. Most fellows of the royal college do not undertake any postmortem examinations.

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Competing interests: None declared.

1 Reisner C. What are coroners and pathologists for? *BMJ* 2009;338:b1355. (1 April.)
2 Lucas SB, Cooper H, Emmett S, Hargraves C, Mason M. A 2006 report. The coroner's autopsy: do we deserve better? London: National Confidential Enquiry into Patient Outcome and Death (NCEPOD), 2006. Available at: www.ncepod.org.uk/2006Report/index.html
3 Biggs MJ, et al. Online survey of current autopsy practice. *J Clin Pathol* (in press).

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Better system in Scotland

Had Reisner's experience occurred in Scotland, I am certain that no postmortem examination would have been undertaken—the view and grant system has much to commend it.[1] By removing a large number of unnecessary necropsies and focusing more on the circumstances surrounding individual deaths, we will be able to do the necessary necropsies (which are still the best available method of investigating death when done in full cognisance of the history and with use of appropriate ancillary investigations) to the standard required for current medical practice.

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Competing interests: None declared.

1 Reisner C. What are coroners and pathologists for? *BMJ* 2009;338:b1355. (1 April.)

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NICOTINE REPLACEMENT THERAPY

Nicotine replacement, effective?

The conclusions of Moore and colleagues about nicotine replacement therapy seem to be slanted.[1] With a long term smoking cessation percentage of only 1.6%, you can hardly call nicotine replacement an "effective" intervention. Although the 1.6% abstinence rate is better than the 0.4% achieved with placebo, how can one call the 1.6% success rate with nicotine replacement "effective"?

The logical conclusion from this systematic review and meta-analysis is that nicotine replacement was a dismal intervention. Most smokers (98.4%) failed to achieve long term sustained abstinence with it. I cannot think of another intervention for which a 98.4% failure rate would be considered a success.

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Competing interests: None declared.

1 Moore D, Aveyard P, Connock M, Wang D, Fry-Smith A, Barton P. Effectiveness and safety of nicotine replacement therapy assisted reduction to stop smoking: systematic review and meta-analysis. *BMJ* 2009;338:b1024. (2 April.)

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TEA AND CANCER

Why northern Iran?

Islami and colleagues say that their ecological study showed that "inhabitants of Golestan drank more tea and at a higher temperature than people living in a nearby area with a low incidence of oesophageal cancer."[1] How might the tea drinking habits of the inhabitants of Golestan compare with those of people living in Iran's other provinces?

The research team used interviews to complete validated questionnaires, but how accurate and honest might the response to the question about alcohol consumption be in an Islamic republic where alcohol is officially prohibited? The rates of alcohol consumption in Golestan might be higher than anywhere else in Iran because of its proximity to other nations around the Caspian sea, alcohol being more readily available for consumption in private. Other areas of Iran may have similar tea drinking habits and lower oesophageal cancer rates because of lower confounding factors such as alcohol.

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Competing interests: None declared.

1 Islami F, Pourshams A, Nasrollahzadeh D, Kamangar F, Fahimi S, Shakeri R, et al. Tea drinking habits and oesophageal cancer in a high risk area in northern Iran: population based case-control study. *BMJ* 2009;338:b929. (26 March.)

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And what of opium chewing?

I am surprised that Islami and colleagues did not also collect information on the local habit of chewing the tarry residues from opium smoking, which Professor Thomas Hewer established in the 1970s as the cause of raised rates of oesophageal cancer in the region.[1] Opium tar was chewed mainly by those too poor to afford opium itself.

But then this finding got Tom Hewer into considerable hot water with the Shah: perhaps the current regime would be equally antipathetic to such a result?

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1 Islami F, Pourshams A, Nasrollahzadeh D, Kamangar F, Fahimi S, Shakeri R, et al. Tea drinking habits and oesophageal cancer in a high risk area in northern Iran: population based case-control study. *BMJ* 2009;338:b929. (26 March.)

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Role of temperature

Islami and colleagues' finding of an association between hot tea and oesophageal cancer has implications outside Iran.[1]

For years in Kashmir we have been looking at the high incidence of oesophageal cancer, probably the commonest cancer (there is not yet a population based registry in Kashmir). A major constituent of the traditional Kashmiri diet is salt tea, brewed for hours in copper utensils. It is served in samovars, where the tea is kept boiling by feeding the central chute with burning charcoal, and poured into large cups, steaming; an adult consumes an average 2-4 cups daily. The tea is consumed as hot as possible.

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1 Islami F, Pourshams A, Nasrollahzadeh D, Kamangar F, Fahimi S, Shakeri R, et al. Tea drinking habits and oesophageal cancer in a high risk area in northern Iran: population based case-control study. *BMJ* 2009;338:b929. (26 March.)

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Apply the British Standard

It's how you make the tea that's important.[1] I think that all tea should conform to British Standard 6008, summarised in the *Guardian*[2 3] (but if someone else is making it, I'm not fussy).

Perhaps we could repeat the study of Islami and colleagues using tea made conforming to British Standards?

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1 Islami F, Pourshams A, Nasrollahzadeh D, Kamangar F, Fahimi S, Shakeri R, et al. Tea drinking habits and oesophageal cancer in a high risk area in northern Iran: population based case-control study. *BMJ* 2009;338:b929. (26 March.)
2 BS 6008:1980, ISO 3103-1980. Method for preparation of a liquor of tea for use in sensory tests. Available at: www.bsi-global.com/en/Shop/Publication-Detail/?pid=000000000000090363
3 Fancy a quick cuppa—in 5000 words?. Guardian 1999 Oct 2. Available at: www.guardian.co.uk/Archive/Article/0,4273,3908389,00.html

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