COMMENTARY

The big question remains unanswered

Keshtgar and colleagues tell the story of a team of breast surgeons who started out doing a routine cosmetic operation; then, an unexpected discovery of cancer led to a succession of further operations, including loss of the patient's breast.[1] They have misgivings about whether this surgery was of benefit and the experience threw up questions for them about cancer screening, the nature of consent, and the ethical dilemmas surrounding it. For me the striking feature is that they lacked evidence. It may not be easy to obtain such evidence, but it is surely the lack of evidence that is the root cause of their dilemma.

Increasingly, investigations are performed on apparently well people. Handling the findings can be difficult within a well considered, evidence based screening programme, and it may be an impossible dilemma for a clinical team confronted with a test result of uncertain pathological significance and expected to act on it. In thoracic surgery we are sent patients who are found on routine follow-up to have pulmonary metastases. These patients are sent to chest surgeons to have the nodules removed,[2] but we have no evidence for benefit.[3] The radiolucent lung is a backdrop against which nodules can be seen more easily than in any other organ, but why should that lead us to break a basic element of consent to operation—to be able to state the expected benefit of the procedure? It is easy to fall into the trap of presuming efficacy in cancer surgery,[4] but such is the degree of selection of patients for surgery that survival may be associated with having had an operation, but not due to the operation. In cancer treatment "doing something" is seen as caring and "giving hope"—while "leaving well alone" is wrongly dismissed as nihilistic.

What should be done with removed breast tissue in the future? The narrative of clinical teaching includes two well worn clinical maxims that are somewhat at odds with each other. One is that all tissue removed at surgery should be sent to the pathology laboratory, as was done in this case; the other is an injunction to request an investigation only if you know how to use the result. In the context of mammoplasty the breast tissue should perhaps be discarded, since detecting occult malignancy was not the objective of surgery. This policy would have spared the patient repeated operations of unproved benefit and saved the team much soul searching. But deliberately not knowing is not an easy decision; the consensus view might well come down on the side of routinely sending the material to the laboratory. This requires ensuring that the patient is aware of possible consequences and that the pathologist receives adequate information.

The big question remains unanswered: what is the best management of a patient with these findings in the future? Not putting the tissue under the microscope may seem unacceptable, but so is continuing surgical practices that may result in harm, without having evidence of benefit.

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1 Keshtgar M, Hamidian Jahromi A, Davidson T, Escobar P, Malluci P, Mosahebi A, et al. Tissue screening after breast reduction. *BMJ* 2009;338:b630.
2 Internullo E, Cassivi SD, Van Raemdonck D, Friedel G, Treasure T. Pulmonary metastasectomy: a survey of current practice amongst members of the European Society of Thoracic Surgeons. *J Thorac Oncol* 2008;3:1257-66.
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4 Treasure T, Utley M. Ten traps for the unwary in surgical series: a case study in mesothelioma reports. *J Thorac Cardiovasc Surg* 2007;133:1414-8.

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ANSWERS TO ENDGAMES, p 723

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PICTURE QUIZ

1 The axial view of the brain (fig 1) shows bilateral subdural haematomas and venous engorgement of the superior sagittal sinus. The sagittal view (fig 2) shows caudal descent of the brainstem with protrusion of the cerebellar tonsils. The ventricles are reduced in size because of a decrease in cerebrospinal fluid (CSF). The net effect is that the brain seems to sag. In addition, the pons is flattened. A sagittal view of the lumbrosacral spine (fig 3) shows a capacious vertebral canal consistent with dural ectasia and a large meningocele at the second sacral vertebra.

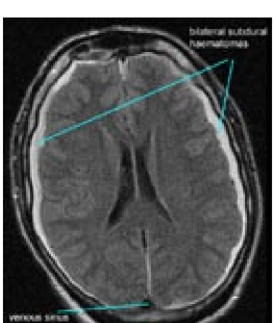
2 The condition is spontaneous intracranial hypotension, which has an incidence of around half that of subarachnoid haemorrhage. The estimated annual incidence of spontaneous intracranial hypotension is 5/50 000. The classic presentation is an orthostatic headache, which disappears when the patient is recumbent, together with stereotypical findings on magnetic resonance imaging (MRI).

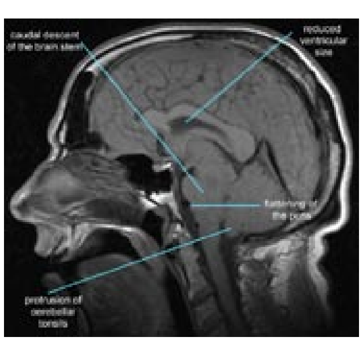
3 Treatment should be directed towards stopping the CSF leak. Computed tomography myelography is the study of choice to identify spinal leakage. Treatments include bed rest, "blind" or targeted epidural blood patching after computed tomography myelography, and surgical repair of the CSF leak. It is thought to recur in 10% of patients, irrespective of the management strategy used.

STATISTICAL QUESTIONS

Crossover trials
a, d

Screening
c, e





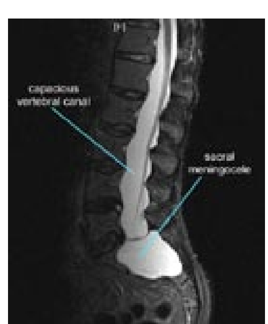


Fig 1 T2 weighted magnetic resonance imaging of the brain: axial view showing bilateral subdural haematomas and venous engorgement of the superior sagittal sinus
Fig 2 T2 magnetic resonance imaging of the brain: sagittal view showing caudal descent of the brainstem with protrusion of the cerebellar tonsils. In addition, the ventricles are reduced as a result of a decrease in cerebrospinal fluid. The net effect is that the brain seems to sag. Note also that the pons is flattened
Fig 3 T2 magnetic resonance imaging of the lumbosacral spine: sagittal view showing a capacious vertebral canal consistent with dural ectasia and a large meningocele at the second sacral vertebra