recognition to the part played by ethics committees in considering approval of the ethical aspects of clinical trials of new drugs. In the two months since the introduction of the scheme (11 March-11 May) 22 clinical trial certificate exemptions were granted. If this trend continues—and there are indications that it will increase rather than diminish—then there will have been a 50% increase in early clinical studies conducted in the United Kingdom at the industry's initiative. It therefore appears, even at this early stage, to be achieving its objective.

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## Lesson of the Week

# Hydrocephalus after spontaneous subarachnoid haemorrhage

SARAH ROBINSON, G HOLDSTOCK

In Britain most patients with subarachnoid haemorrhage present to the general physician and are then referred to neurosurgical centres, where they are considered for carotid angiography and surgical correction. On the basis of this they are then either treated surgically or sent back to the referring hospital for conservative management.

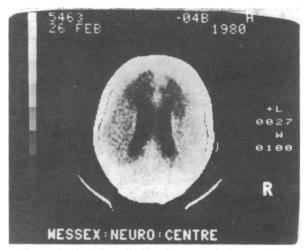
We report on two patients with subarachnoid haemorrhage who were not at first thought suitable for surgery and who continued to deteriorate on the medical wards. Both had conditions that could be easily corrected by surgery.

#### Case reports

Case 1-A 64-year-old man was admitted to hospital semicomatose, with a two-day history of headache of sudden onset followed by vomiting. His neck was stiff, and a clinical diagnosis of subarachnoid haemorrhage was confirmed by lumbar puncture, which showed heavily blood-stained cerebrospinal fluid (CSF). His general condition improved at first, and he was referred to the neurosurgeons, who recommended conservative treatment in view of his age and history of angina. Over the next two months his condition deteriorated, and he was a severe nursing problem. He was disorientated, dysphagic, doubly incontinent, and developed a marked ataxic gait. He was referred back to the neurosurgical unit for computed tomography (CT), which showed dilated ventricles, and a ventricular atrial shunt was inserted. Almost immediately there was great clinical improvement, and 10 days later he was discharged, having completely returned to normal. Two years later he remains well and has become chairman of the local Rotary Association.

Case 2—A 52-year-old woman was admitted complaining of a severe headache, nausea, and vomiting. She gave a history of mild hypertension and angina. On examination she was drowsy, with marked neck stiffness. Lumbar puncture confirmed the diagnosis of subarachnoid haemorrhage. She underwent

Some patients who have had a subarachnoid haemorrhage and who have been considered unsuitable for surgery may have a hydrocephalus that can be easily corrected



CT scan showing bilaterally dilated intraventricular ventricles.

bilateral carotid arteriography, which showed an anterior communicating and a left-middle cerebral artery aneurysm. These were not thought suitable for surgery, and she returned to the ward having suddenly deteriorated presumably because of a further haemorrhage. Over the next six weeks her general condition deteriorated. She became disorientated, dysphagic, disinterested in her surroundings, doubly incontinent, and unable to walk. A consultant neurologist thought that the most likely diagnosis was a further haemorrhage, but she underwent CT to exclude hydrocephalus, and this showed dilated ventricles (figure). After a Spitz-Holter valve was inserted she made a

rapid recovery, and two weeks later was discharged with no residual signs. Before admission to hospital she was an avid crossword fan, and neither she nor her family noted any deterioration in her ability after returning home.

#### **Discussion**

Low-pressure hydrocephalus or Hakim's syndrome<sup>1 2</sup> is a rare but well-recognised condition. It may occur spontaneously,3 but more commonly presents as a complication of subarachnoid haemorrhage.4 The presumed aetiology is that haemorrhage leads to a transiently high CSF pressure, causing the ventricles to expand. Debris from the haemorrhage causes an adhesive arachnoiditis that interferes with CSF drainage and so the ventricles continue to expand. The largest area of the ventricle (frontal horn of the lateral ventricle) expands more than the other areas (third and fourth ventricles) and thus accounts for the typical symptoms of this syndrome—namely, dementia, gait disturbance, and urinary incontinence (frontal lobes). Only the more severe cases present with drowsiness (third ventricle) and nystagmus (fourth ventricle). Diagnosis by conventional neuroradiological methods was difficult, but CT has made diagnosis much easier, though even when hydrocephalus is shown on the scan it is difficult to tell whether symptoms are due to this or to the preceding haemorrhage. Often this can be resolved only by inserting a valve and observing the patient's progress.<sup>5</sup>

These two patients lingered in medical wards for a long time before a diagnosis was made, and both required intensive nursing care and were destined for long-stay institutions. Their lives and those of their families were transformed by a simple operation. The savings in terms of human suffering, and expense to the National Health Service, of this simple procedure justify the growing use of CT for such patients, even for those over 60 years of age who may not be considered for neurosurgical treatment in some centres. The delay in diagnosis was partly due to the mistaken belief that the deficits were the legacy of the original haemorrhage, but it was compounded by having to wait to have CT performed. Although it is known that the syndrome follows subarachnoid haemorrhage it is not mentioned in several of the standard medical textbooks. General physicians who look after patients with subarachnoid haemorrhage should be aware of this syndrome because simple correction by surgery may effect a dramatic cure.

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## Help for the Disabled

### Helping disabled people with travelling costs

GEOFFREY S ROBERTS

The cost of travelling has escalated sharply over recent years, and this in itself must add to the problems disabled people encounter in maintaining their mobility. If, however, full use is made of the allowances, concessions, and exemptions available to this group of people (table) the cost of travel may be considerably reduced.

Allowances, concessions, and exemptions available to disabled people

Allowances Mobility Travel to work Concessions Car purchase Public transport
Exemptions
Road tax on private cars
Value added tax on car adaptations
Rates on a garage

#### Wavertree, Liverpool L15 4LL

GEOFFREY S ROBERTS, MB, FRCGP, general practitioner and part-time medical boarding practitioner, DHSS

#### Mobility allowance

The mobility allowance is a weekly payment of £14.50 (£16.50 from November 1981) paid to those who are unable to walk, or virtually unable to walk, owing to a physical disablement. The disability must be likely to remain for at least a year and the person receiving the allowance must be able to make use of it—for instance, a person who must not be moved for medical reasons is not eligible.

Claimants must be aged between 5 and 65, and must be able to satisfy certain conditions of residence. Once awarded the allowance may be paid up to age 75, provided that the necessary conditions continue to be satisfied. It is paid in full during any period in hospital or residential care.

Before the award can be made a medical examination is usually necessary unless sufficient information has been obtained from records held by the DHSS.

The allowance is a taxable, non-means tested, non-contributory benefit, and is paid in addition to other social security benefits—for example, invalidity benefit, attendance allowance,