

direction and supports the views of Murphy, and incidentally our own findings.

I apologise for failing to note this important paper, thereby inadvertently misrepresenting Dr Manson's views.

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Obturator hernia: an elusive diagnosis

I was most interested in the report by Tiwary *et al.* (March 1992 *JRSM*, p 180) on strangulated obturator hernia in an elderly woman, presenting as an abscess in the left groin. Their title caught my eye because it is the same as that used by Kozlowski and Beal¹ for their article describing strangulated obturator hernia in three elderly women, the first of whom presented with an abscess in the groin. In this instance the abscess was in the right groin, the more common side for strangulated obturator hernia in female patients by a ratio of 3:1², perhaps making the report by Tiwary *et al.* more unusual than they knew.

Tiwary *et al.* gave the Howship-Romberg sign pride of place in their reference to the four cardinal signs of obturator hernia. They list three additional less common signs but fail to mention absence of the thigh adductor reflex which I described in two cases of strangulated obturator hernia³. I hope others will look for this sign (if the rare opportunity should arise) as it might help to promote the earlier clinical recognition of obturator hernia, the diagnosis of which is all too often made on the operating table.

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Breast cancer and liver metastases - incidence, diagnosis and outcome

Although the findings of Hoe *et al.* (December 1991 *JRSM*, p 714) in many ways support our own experience at Guy's Hospital over a 12-year period in 312 patients with breast cancer and liver metastases¹, there are important differences between the two series. At Guy's the majority of primary tumours were poorly differentiated but steroid receptor positive. The disappointing median survival of 3.8 months from the diagnosis of liver metastases emphasizes the importance of establishing prognostic factors. Interestingly, those identified in the larger study at Guy's¹ were different from those described by Hoe *et al.*. The presence of extrahepatic metastases did not signify a worse prognosis. However, the presence of jaundice, ascites, clinical hepatomegaly or abnormalities of liver biochemistry were all significantly ($P < 0.01$) associated with a particularly poor prognosis. In a multivariate analysis, the degree of elevation of serum aspartate transaminase (AST) was the single most important prognostic factor.

The treatment of these patients is difficult. In our experience, endocrine treatment is associated with a response rate of only 9%¹. We have, therefore, conducted a series of prospective trials of chemotherapy trials in over 100 of these patients²⁻⁴. Mitoxantrone had a low response rate and unacceptable toxicity². Epirubicin 25 mg/m² given weekly was well tolerated and produced an encouraging response rate of 30% in this group of patients with a poor prognosis³; dose intensification was not, however, possible⁴. Pharmacokinetic studies have shown that epirubicin pharmacokinetics are influenced by serum AST⁵ and we are evaluating the use of serum AST level to calculate epirubicin dose.

We strongly believe that further studies should be conducted in well characterized groups of patients with liver metastases, many of whom are excluded from clinical studies in advanced breast cancer.

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Alvarado score and acute appendicitis

The Alvarado score does not contribute much to the clinical diagnosis of acute appendicitis (February 1992 *JRSM*, p 87). The overall diagnostic accuracy of 87.4% and perforation rate of 15-23% produced by Owen *et al.* using the scoring system, is comparable to diagnostic accuracy of 81.4%¹ and 87.4%² from two centres and a perforation rate of 18%.

The score³ does not take into account age, sex, rigidity and duration of symptoms, all of which have more predictive values than tenderness and equal predictive value with leucocytosis⁴. The difference in sex is highlighted by the lower accuracy (78%) in females. Presentation and pathology of acute abdomen in the elderly is more diverse and less classical⁵.

Forty-six patients (70 years and above) presented in a district hospital with right iliac fossa pain, only eight (17.4%) had appendicitis with a median Alvarado score of 5.5 (93% confidence interval 4-7). The other 38 had a median score of 4 (96.6% CI 4-6). Three (37.5%) of eight patients with a score of 7 and above had appendicitis, two bowel infarction, one each

had cholecystitis, diverticulitis and gallstone ileus. Fourteen patients had a score of 5-6, of whom three (21.4%) had appendicitis. Two patients with appendicitis had a score below 5, one of whom perforated. All three patients with perforation did not have a leucocytosis.

The factors that make up the Alvarado score are specific for inflammation and any gastrointestinal disturbance, this makes it virtually useless in the elderly. It has not been shown to reduce negative appendectomy rate in all age groups like other recent scoring systems⁶. Finally, eliciting rebound tenderness should be discouraged. Its diagnostic weight is the least³, it is misleading and causes fruitless discomfort⁷. Percussion tenderness which is gentler and gives the same information, is more useful.

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History of research into hypertension

Dr P M Esunge had, apparently, only a page of the Journal to write a history of research into hypertension from 2600 BC to the present (October 1991 *JRSM*, p 621). Thus, perhaps it was inevitable that some accuracy was sacrificed for brevity. Nevertheless, for the sake of historical verity and the true record of British pharmacological effort, I should like to gently correct two errors. The ganglion blocking agent hexamethonium was introduced by Paton and Zaimis¹, not Zianis as erroneously stated both in the text and in the bibliography. Furthermore, bretylium was not studied by Freis, as stated, 10 years before it was synthesized by Dr F C Copp and 12 years before my colleagues and I described its pharmacological properties and results of its first clinical trial^{2,3}.

Your readers interested in those exciting times in development of antihypertensive therapy should consult Chapter 2 of *Discoveries in Pharmacology* as an authoritative source⁴ describing part of the effort.

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Measurement of HDL cholesterol

I read with interest the paper of Dr Feher *et al.* (January 1992 *JRSM*, p 8) about the importance of measurement of HDL-cholesterol. I agree with their opinion that the measurement of cholesterol is not enough in practice.

We investigated the lipid metabolism of 249 patients with acute cerebrovascular disease (TIA, RIND and cerebral infarct) within 18 months. In each case we measured the level of cholesterol, the HDL-cholesterol, the triglyceride and calculated the LDL-cholesterol and atherosclerotic index.

In three cholesterol groups (cholesterol under 5.2 mmol/l, between 5.2-6.5 mmol/l, over 6.5 mmol/l) the rates of pathologic HDL-cholesterol were 28.7%, 13.1% and 24.5%, the rates of elevated LDL-cholesterol were 2%, 63.6% and 98%. The mean values are seen in Table 1.

Table 1.

Total-cholesterol (mmol/l)	HDL-cholesterol (mmol/l)	LDL-cholesterol (mmol/l)	Triglyceride (mmol/l)	Atherosclerotic index
<5.2	1.11	2.68	1.40	4.3
5.2-6.5	1.30	3.77	1.72	4.9
>6.5	1.22	5.25	2.89	7.4

*P>0.001; **P>0.01

In the group of patients with increased triglyceride there were significantly elevated total-cholesterol, LDL-cholesterol and atherosclerotic indexes and significantly lower HDL-cholesterol levels comparing with values of the patients with normal triglyceride.

Our data suggest that we have to routinely measure the HDL-cholesterol and triglyceride too. The LDL-cholesterol levels and the atherosclerotic index are more sensitive to indicate the disturbances of lipid metabolism. The hyperlipoproteinaemias as risk factors of cardiovascular diseases occur often with other risk factors. We found significantly higher cholesterol, LDL-cholesterol, triglyceride and atherosclerotic indexes in patients with hypertension and even higher in patients with hypertension and diabetes mellitus compared with data of patients without hypertension and diabetes mellitus.

The treatment of cerebrovascular diseases must involve the control of lipid disturbances considering all lipid fractions. Treating hypertension we emphasize the importance of the choice of antihypertensive drugs; we do not give drugs with an HDL-cholesterol lowering effect. In our opinion the hypertriglyceridaemia has also a significant role in the pathogenesis of athero- and arteriosclerosis and must be treated too, mainly with dietary prescriptions or triglyceride decreasing drugs.

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