Letters to the Editor

Graves' disease and insulin-dependent diabetes mellitus in idiopathic Addison's disease

Sir,

In their interesting study, Kasperlik-Zaluska *et al.*¹ found a thyrotoxicosis frequency of 12% in patients with Addison's disease (group B in their article) claiming that this was a higher frequency than in other studies. However, we reported in 1990² a frequency of Graves' disease of 23% (10 out of 44) in patients with idiopathic Addison's disease (observation period: median 17 years, range 0.5–41). In addition in our study² Graves' disease preceded Addison's disease in 70%, developed later in 20% and was concurrent in one patient; the median age at diagnosis of Graves' disease was 23.5 years (range 11–59) compared to 32.5 years (range 8–62) in all patients with Addison's disease. These findings were in accordance with the results of Irvine *et al.*³ but are in contrast to those of Kasperlik-Zaluska *et al.*,¹ as indicated by their Table II.

Furthermore, diabetes mellitus type I was seen in 6% in group B in the study of Kasperlik-Zaluska *et al.*¹ with a high age at onset (mean 42.9 years, range 33–53). In our study² a frequency of insulin-dependent diabetes mellitus of 20% (nine out of 44) was seen (median age at diagnosis 16 years, range 2–73). Insulin-dependent diabetes mellitus preceded Addison's disease in 78% with a median duration of 14 years (range 1–29),² a finding previously reported by Nerup.⁴

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Pneumoperitoneum without peritonitis

Sir,

We read with interest the article of Daly *et al.*¹ which highlights the different causes of benign pneumoperitoneum and the importance of recognizing this condition to avoid the risks of unnecessary laparotomy. We

have encountered this condition recently in a 58 year old man with progressive scleroderma. The patient developed pneumoperitoneum and underwent laparotomy but no evidence of peritonitis or bowel perforation was found. However, multiple air-filled cysts were seen in the wall of the small bowel. A 70 cm segment of jejunum was resected and histological examination confirmed the diagnosis of pneumatosis intestinalis. The source of intraperitoneal gas in this condition is thought to be secondary to spontaneous rupture of the sterile air-filled subserosal cysts. Several months after full recovery from the operation, the patient suffered another episode of benign pneumoperitoneum which resolved spontaneously; surgical interference was avoided on this occasion.

Pneumatosis intestinalis is a rare but well-recognized complication of scleroderma. Originally it was thought to have a grave prognosis² but more recent reports suggest a less ominous significance³ and our own case supports this view. The mechanism by which it develops is uncertain; however, it has been suggested that excess gas production due to bacterial overgrowth, combined with increased intraluminal pressure due to disordered bowel motility, may lead to leakage of gas into the bowel wall.⁴ Pneumoperitoneum in scleroderma may also occur secondary to perforation of peptic ulcer or jejunal diverticulae.⁴ The diagnosis of a benign pneumoperitoneum in these patients can be difficult, since many of them are on steroid therapy, which may modify or mask the clinical features of peritonitis. However, careful clinical and radiological evaluation should lead to the correct diagnosis and prevent unnecessary laparotomy in patients who may be a poor operative risk.

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