Correspondence

Empyema of the gall bladder

Sir,

The excellent article written by Dr Thornton and colleagues about empyema of the gall bladder (*Gut* 1983; **24**: 1183–5) raises the problem of distinguishing cholecystitis from gall bladder empyema.

The whitish, purulent-like fluid often found in a gall bladder with cholecystitis, composed of calcium and bilirubin precipitates, debris, and a few white blood cells, often with bacteria, is not very different from pus collected from a gall bladder with empyema, which often contains remarkably few white blood cells.¹

Studies in Japan suggest that cholecystitis is sometimes an infectious disease from the beginning, namely when associated with bile pigment and calcium, or mixed stones, in whose origin infection with β -glucuronidase producing *E coli*, *Klebsiella*, *Bacteroides*, or *Clostridium* could play an important role.^{2,3} In western countries infection seems to be generally secondary to cholecystitis.^{1,3} Cholecystitis can be initiated by phospholipase – for example, released by trauma from a stone – which converts lecithin into lysolecithicin and activates prostaglandin.⁴ Acalculous cholecystitis in debilitated patients is initiated by necrosis of the gall bladder blood vessels, probably related to factor XII activation.⁵ Whatever the cause of the inflammation, intestinal bacteria can reach the gall bladder by the portal circulation, and then directly from the liver through the bile, or through the lymphatics between the liver and the gall bladder. Occasionally infection may reach it by the cystic artery, or through the common duct.¹ The frequency of *bactobilia* increases during the first week of acute cholecystitis, reaching up to 75%, and then decreases slowly.⁶

The final outcome of empyema, or cholecystitis, depends on the complications, including bacteraemia and sepsis and these are related to the age of the patient and the length of obstruction.⁶ But the clinical, as well as the laboratory differences between these two entities remain to be sharply defined and a question has to be asked: is there a real frontier between cholecystitis and gall bladder empyema?

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Books

Recent advances in gastroenterology 5 Edited I A D Bouchier. (Pp. 282; illustrated; £20.) Edinburgh: Churchill Livingstone, 1983.

As in the previous issue the fifth volume of *Recent advances in gastroenterology* covers the whole of gastroenterological practice including hepatology. Contributors were asked to survey the literature from 1979–1981 and to discuss significant advances. Overall they have satisfied this brief to good effect and the reader is provided with a comprehensive coverage of significant papers on the oesophagus, the stomach and duodenum, the colon, inflammatory bowel disease, the liver, hepatitis (viruses and antigens), the pancreas and the gall bladder and biliary tract. The section on the small intestine provides an exception. Hegarty and Silk have devoted most of their chapter to an excellent readable review of gut hormones and peptides. The remainder is given over to factors affecting the absorption of peptides, iron, and vitamin B12.

Paediatric gastroenterology is particularly well covered now that there are separate chapters for the liver and gastrointestinal tract. As with the contribution on the small intestine the authors have indulged themselves and extended their review of the literature beyond the period 1979–1981. It makes for particularly useful reading for the general gastroenterologist who from time to time is asked to help in the management of paediatric problems.

Inevitably there are a few gaps in this volume. Surgical aspects of gastroenterology, particularly of the colon, receive scant attention. There is little on coeliac disease or about infections and bacterial