Prevalence of cholecystitis in gallbladder histology following clinical pancreatitis: cohort study

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Introduction
Cholelithiasis occurs in 10% of the population, most commonly caused by gallstone formation from bile salt cholesterol hypersaturation.1 Common presentations include cholecystitis and pancreatitis, yet these two gallstone diseases rarely seem to happen simultaneously. Gallstone pancreatitis occurs when gallstones escape from the gallbladder and become lodged within the common bile duct causing back pressure onto proximal organs. If gallstones are the aetiology of pancreatitis, cholecystectomy is performed. This prevents further gallstones migration rather than treating cholecystitis. In such patients, what does the gallbladder histology show and what is its relevance? The only previous study found 39.6% of gallbladders in gallstone pancreatitis demonstrated cholecystitis on histology.2

Summary
We looked into gallbladder histology over one year to see whether those who have had pancreatitis have any difference in their reports compared to those who have had cholecystitis.

Objective
To establish if and what difference there is to the histology of different gallbladder pathology.

Results
A total of 206 cholecystectomies were performed during that year: 157 (76.2%) females and 49 (23.8%) males. Thirty-one (15%) had gallstone pancreatitis. For both groups, all histology showed cholecystitis. One (0.5%) was unaccounted for as no report was found. The pathological appearance of cholecystitis was the same in both groups.

Only nine (29.0%) of the pancreatitis patients had this written in the clinical summary of the histology form. Twenty-nine of the 31 pancreatitis slides were reviewed (two were not found) with the accurate clinical details. All had cholecystitis. One (0.5%) was unaccounted for as no report was found. The pathological appearance of cholecystitis was the same in both groups.

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the wall (mucosa, smooth muscle and part of subserosal connective tissue) and severe as involving full thickness. The previous study showed cholecystitis (both acute and chronic) in 39.6% of cases and also noted 60.1% of cases demonstrated common bile duct obstruction histology with neutrophil aggregates but did not classify this as ‘cholecystitis’.

**Conclusion**

More than two-thirds of information provided to pathologists was incorrect. All gallstone pancreatitis had cholecystitis but the clinical significance is unclear. This differs from the only previous study. This variation could be due to different histology reporting criteria, increased incidence of cholecystitis, an overlap of two common conditions or simple chance. However, the persistence of upper abdominal pain after gallstone pancreatitis could be due to cholecystitis. We suggest a longer duration review as only 31 patients were included in this study.

**References**

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2. Chitkara YK. Pathology of the gallbladder in gallstone pancreatitis. *Arch Pathol Lab Med* 1995;119:355–9

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