

Cholecystographic documentation and follow-up of gallstone fragment migration during the percutaneous treatment of cholelithiasis

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SUMMARY. In this paper we evaluated the frequency, consequences of, and therapeutic approach to fragment migration after percutaneous treatment of gallstones. Fragment migration occurred in 10 (17%) of 58 patients undergoing either percutaneous contact dissolution or mechanical stone removal. Fragments impacted in the cystic duct in five patients, while fragments passed into the common bile duct (CBD) in six patients (one patient had both simultaneously). Cystic duct fragments were symptomatic in four of the five patients, three patients were symptomatic at the time of fragment detection and were treated immediately (two with further contact dissolution and one by flushing the fragment from the cystic duct to the duodenum). CBD fragments were asymptomatic and passed spontaneously in four of the six patients. Two patients with CBD fragments had endoscopic retrograde cholangiography and sphincterotomy to remove fragments, as they were unwilling to await possible spontaneous passage of fragments.

None of the following factors predisposed to the development of gallstone fragment migration: a large stone burden, the gallbladder volume, the presence of gallstone calcification, or the crushing of calculi prior to extraction. Eight patients with migrating fragments had an oral cholecystogram performed prior to stone removal and all had a functioning gallbladder.

The results of this study suggest that fragment migration is a potential, but unpredictable sequela of percutaneous treatment of cholelithiasis. The results also suggest that the need and timing for therapeutic intervention depend primarily upon the site of fragment migration. Cystic duct fragments usually require intervention while CBD fragments may pass spontaneously.

The effectiveness of post-procedure criteria for discharge following outpatient percutaneous nephrostomy

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SUMMARY. Purpose: to evaluate the effectiveness of post-procedure discharge criteria by