



## Endoscopic Removal of Longest CBD Stone

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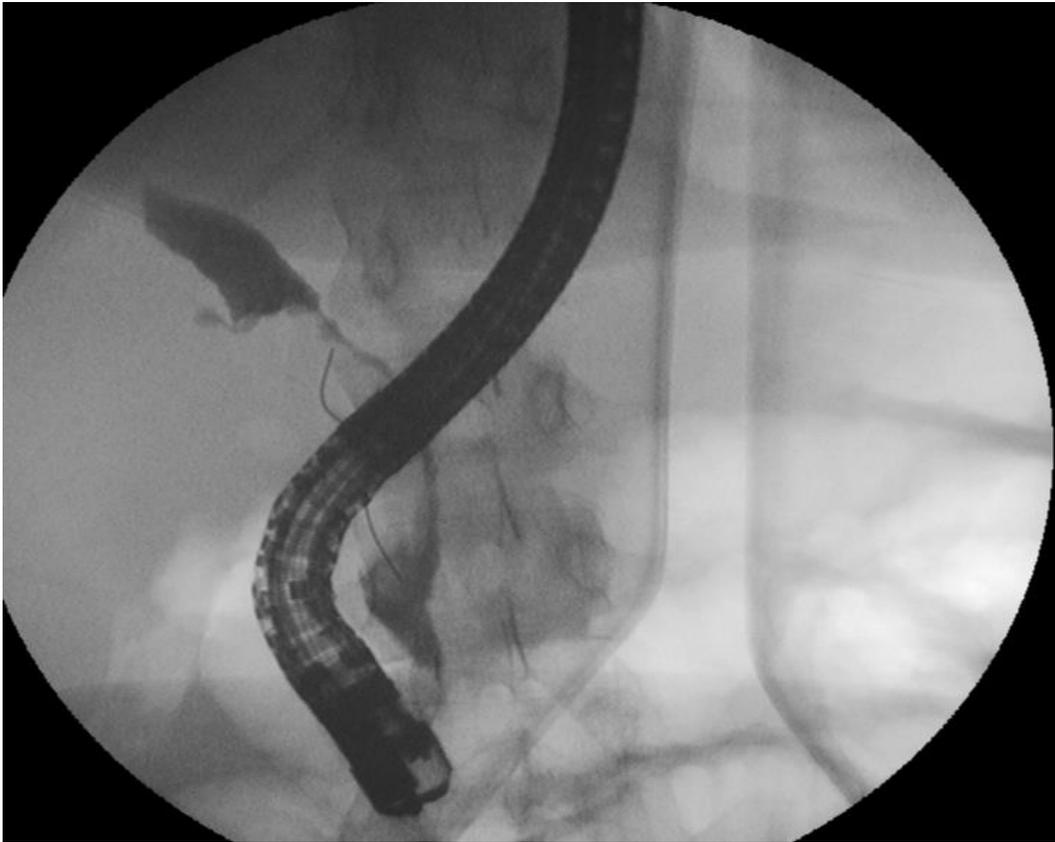
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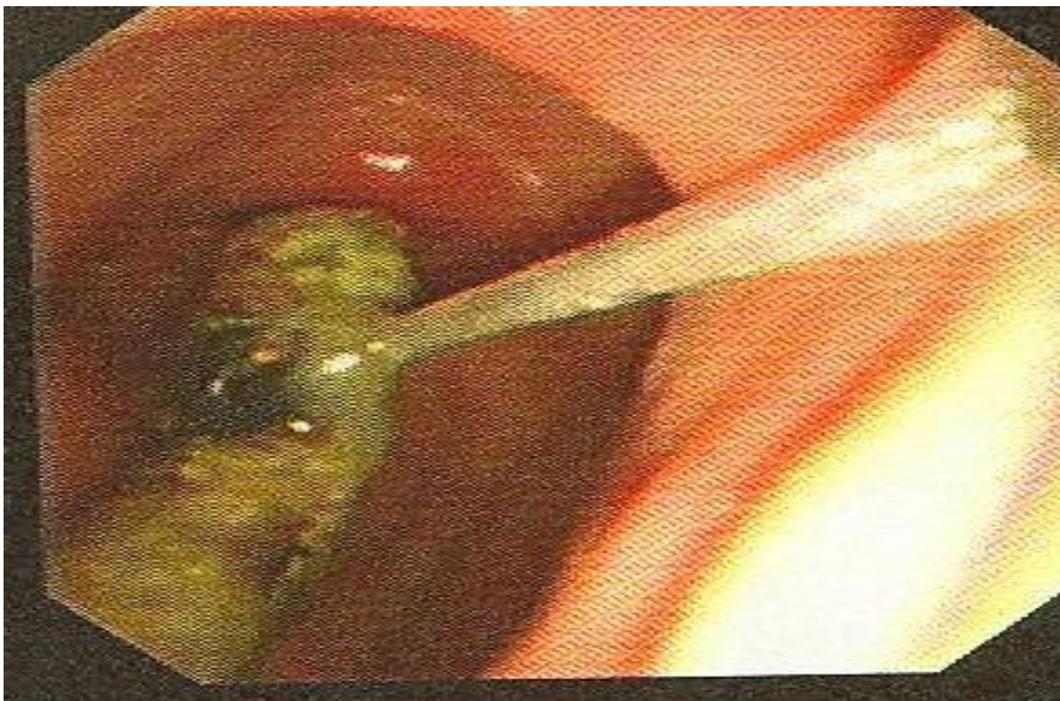
### Case

A 19 years old lady with no Known Co morbidities was referred us with History of right hypochondrial pain without fever, jaundice or itching, her other systemic review was unremarkable. Base line blood test including full blood count, Liver function test and coagulation were normal. Ultrasound of abdomen showed multiple gall stones and a stone in CBD.

Base on the findings of imaging an ERCP (Endoscopic retrograde Cholangiopancreatography) was performed after explaining the risk and benefit of the procedure, a written consent taken. ERCP was performed under controlled sedation. Cholangiogram showed large filling defect occupying most of the CBD length consistent with stone (Fig:1),



Widest calibrated CBD diameter was 17mm. A large Sphincterotomy performed, balloon passed through guidewire and a Large elongated stone of 6cm long and 1.1cm wide was retrieved (Fig:2).



Patient was kept under observation, no immediate complication seen and patient was referred for Cholecystectomy

Considering the large size of stone and its hard consistency stone retrieved from the gut with the help of snare as shown in Fig:3



## Discussion

Gall stone disease and its complication is one of the common problems in this part of world, probably because of the increase number of patients with haemoglobinopathies apart from other risk factor. Also, the size of CBD (common bile duct) stone may vary in this region compared to west, large, multiple and impacted stone are seen commonly here. Endoscopic retrograde cholangiography (ERC) with endoscopic sphincterotomy (ES) and stone extraction has been increasingly used as primary management strategy for Cholidocholithiasis for the past few decades and are considered standard therapies for the treatment of common bile duct (CBD) stones<sup>1-3</sup>.

In majority of cases the clearance of duct can be achieved by this conventional method and Reported success rate is ranging from 85% to 100% in different studies<sup>4-5</sup>. But ERC become more challenging for endoscopist when stones are larger (>15mm), stones above the stricture or impacted stones<sup>6</sup>.

Definition of large CBD stone is still not clear but stone more than >10—15 mm in diameter is considered as large stone.

There are multiple other therapeutic techniques available when the traditional techniques are failed to remove the stone. Mechanical lithotripsy or shock wave lithotripsy are usually considered as safe and effective alternate methods of retrieving stones<sup>6-8</sup>

In our limited experience at our institution so far we did more than 250 ERCPs and majority cases had CBD stones, this is the longest CBD stone which was removed endoscopically, it is unique in a sense that the stone was of CBD shaped (elongated) it is longest stone so far which is removed by conventional technique (ERCP with ES) and retrieval Balloon without using ESWL or EPBD (Endoscopic papillary balloon dilatation).

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