

GEORGE

I'd like to tell you today about a patient who was recently referred to me. A 58-year-old woman who had

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undergone an ERCP at another hospital for bile duct stone disease. She had also undergone an uncomplicated laparoscopic cholecystectomy but unfortunately re-presented with obstructive jaundice three months later.

Imaging in the form of an MRCP had demonstrated an eight millimeter stone in the lower bile duct.

She then underwent, not one but two, conventional ERCPs, aimed at removing the stone but both of these were unsuccessful. A bile duct stent was re-inserted and she was referred to our unit for consideration of cholangioscopy and electrohydraulic lithotripsy using the SpyGlass DS System.

During the procedure itself the previous biliary stent was removed. The cholangiogram demonstrated a stone in the lower duct. And from the original cholangiogram there was a suspicion that this stone may be partially or completely located within the cystic duct stump, i.e. that this was a Mirizzi Syndrome. Using the SpyGlass DS System, the finding of a Mirizzi Syndrome was very clearly confirmed with the stone located entirely within the distal cystic duct.

Using electrohydraulic lithotripsy, the stone was very effectively fragmented and the fragments could then be removed with a combination of flushing and subsequent balloon trawl. On the middle fluoroscopy panel here you can see the stone within the lower duct and the SpyGlass DS scope being passed up to the stone, which is nicely seen in the left panel.

Using electrohydraulic lithotripsy, the stone was very nicely fragmented in only a few shots of the electrohydraulic lithotripsy. After stone clearance we then see that the SpyGlass DS scope is within the cystic duct. We see the spiral folds characteristic of the cystic duct. And following further EHL up into the system duct, nicely demonstrated here on the left. We can see that in the middle of the screen that the scope is passed into the cystic duct stump with the cholecystectomy clips in place.

And so in this case, we were able to very nicely visualize the cystic duct right up to the clips, the point of closure of the cystic duct, and then into the bile duct itself. We were able to confirm at the end of the procedure that the stones had been cleared from the cystic duct and the main bile duct. And this patient was entirely well six months after follow up and we would expect no further clinical problems.

Mirizzi syndrome is a clinical problem that is ideally both diagnosed and treated with SpyGlass DS. The diagnosis of Mirizzi syndrome can be challenging because on conventional cholangiography the stone appears to be within the bile duct but SpyGlass DS beautifully demonstrates the stone in the origin of the cystic duct.

Conventional approaches to removing these stones at ERCP are almost always unsuccessful because it is usually impossible to engage the stone within the origin of the cystic duct with either a basket or a balloon. It is, in my experience, an excellent indication for therapeutic SpyGlass DS with electrohydraulic lithotripsy as shown in this case.