Using Radio Frequency Ablation (RFA) for Successful Decompression of a Bile Duct Stricture Secondary to Cholangiocarcinoma

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technique spotlight

Patient History
The patient was a 75 year old woman diagnosed with cholangiocarcinoma in the CBD 1-1/2 years prior. The patient had undergone multiple plastic stent placements and exchanges, and subsequent placement of an uncovered WallFlex™ Biliary RX Stent (10x60mm) at another medical facility. The patient was receiving chemotherapy. In a repeat ERCP with cholangioscopy a tumor ingrowth of the stent was revealed and confirmed by an intraductal biopsy. The treating physician referred the patient for an RFA procedure.

Procedure
An occlusion cholangiogram was performed which revealed a stricture covering roughly half of the stent’s length. In an attempt to accurately identify the lesion’s definitive location, the stricture was explored using the SpyGlass™ DS Direct Visualization System which revealed a slightly longer lesion than what had been revealed in the cholangiogram (Figures 1, 2).

To prepare for the ablation, the Habib™ EndoHPB Bipolar Radiofrequency Catheter was connected to the adapter cable and to the Erbe Vio 300 electrosurgical generator. The generator was set to Soft Coag Mode, effect 8, and 10W, with a 90 second time limit. The degree of tumor ingrowth was estimated to be 70% of the 60mm stent length. The Habib EndoHPB Catheter will produce a 25mm ablation length, per ablation. As a result, two ablations were conducted starting distally. Following the 90 second burn and a 60 second pause, the catheter was pulled back from the initial position and the second ablation was initiated at the same settings.
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Following a 60 second pause, the Habib EndoHPB Catheter was then removed from the CBD and a balloon sweep of the ablated zone was conducted to extract the ablated tissue. The SpyGlass DS System’s SpyScope™ DS Access & Delivery Catheter was reinserted into the bile duct to confirm positive RFA results and margins.

Conclusion

Restored luminal patency was observed immediately (Figure 3). The procedure was well tolerated by the patient who was discharged shortly after. Three months post procedure, the patient will return for a follow-up RFA treatment to maintain lumenal patency.