

## Liver Drainage using the Cube Navigation System

### Summary

CT-guided drainage of suspected infection on the edge of a resected portion of the liver

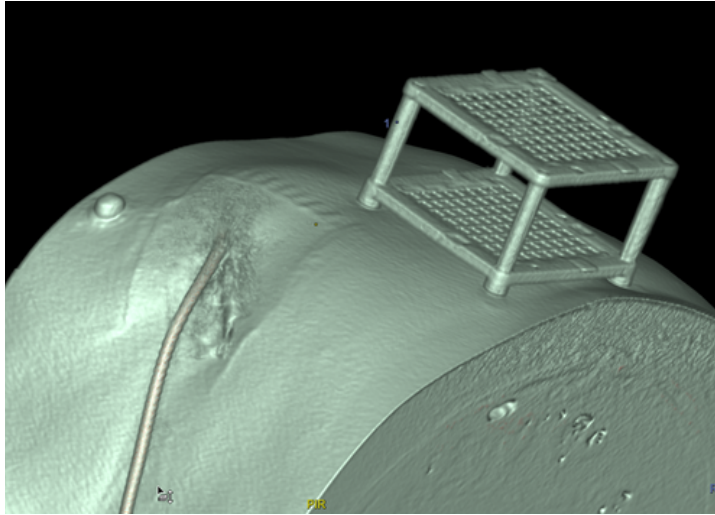


Figure 2: Reconstruction showing the Access Cube placed ahead of the drainage

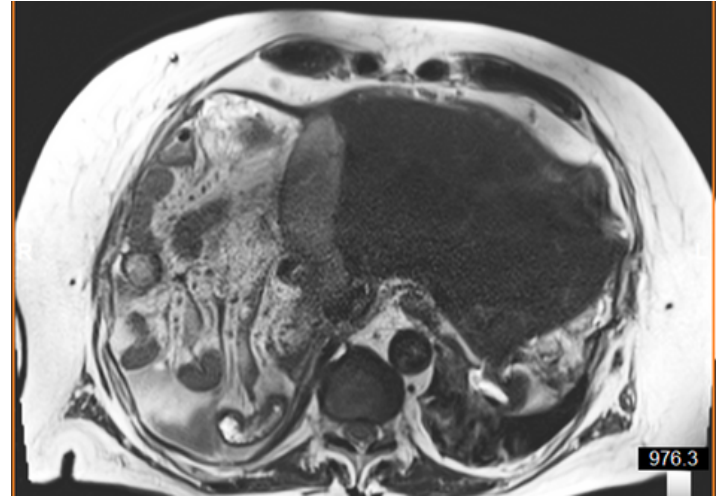


Figure 1: Planning scan showing fluid on the liver edge

#### Patient Profile

73 year old male, diagnosed with perihilar cholangiocellular carcinoma. Received a trisectorectomy (Segments 1, 4-8) January 2023

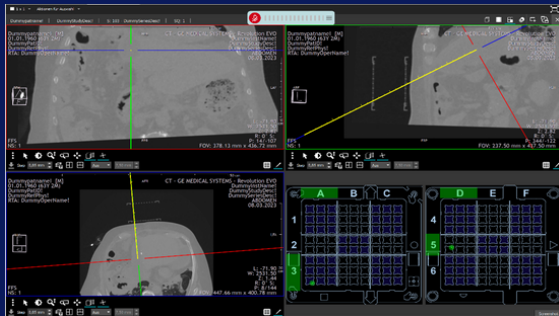


Figure 3: Puncture navigation using the Cube Navigation System with Access Cube

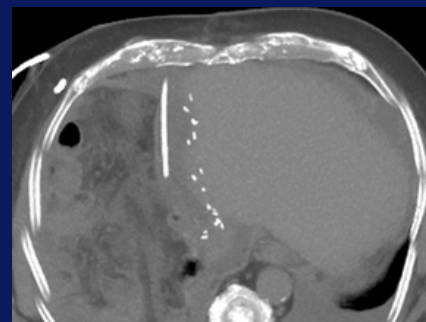


Figure 4: Verification scan with stent in place

#### Procedure

Fluid retention was detected on the edge of the resection zone (Fig. 1). The care team suspected this was due to infection. A puncture and drainage was scheduled to be performed under CT guidance. Due to anatomical considerations, a very angulated, double oblique access route was required to hit the target.

The Cube Navigation System was chosen as the preferred method of navigation support. Because of the steep angle, the Access Cube was placed several centimeters inferior to the target (Fig. 2). Although outside of the Access Cube's boundaries, the target was still easily reached (Fig. 3).

#### Result

Target was reached on the first attempt without need for intermittent control scans. A verification scan confirmed the stent location and the procedure was performed without complication (Fig. 4). The entire procedure lasted less than 10 minutes and was performed without complication.



#### Team

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