

Image in EUS

## Shearing of the Sheath of the Guide Wire: A Complication of Endoscopic Ultrasound-Guided Rendezvous Procedure

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A 35-year-old female with acute cholangitis secondary to the common bile duct (CBD) stone and failed endoscopic retrograde cholangiopancreatography cannulation was subjected to endoscopic ultrasound (EUS) guided rendezvous procedure. EUS-guided puncture of CBD was done and a terumo guide wire (0.032 inch) was pushed into the CBD through the access needle (Wilson Cook). An attempt was made to negotiate the guide wire into the descending duodenum by manipulation. During the manipulation withdrawal of the guide wire resulted in resistance (Fig. 1A). A forceful attempt resulted in formation of a coil of sheared terumo wire sheath coating beyond the needle tip. The needle and the EUS scope were pulled out of the patient and the guide wire was left inside CBD. Gentle pulling of the guide wire did not allow the sheared guide wire to come out of CBD. On endoscopic examination, the sheath of the guide wire and the steel wire were seen separately (Fig. 1B). The sheared sheath was caught with a biopsy forcep and pulled

back with persistent and slow traction and this resulted in uncoiling of the coiled sheath inside the CBD (Fig. 1C and D). Subsequently the guide wire could be pulled out of the CBD by gentle traction (Fig. 1E and F).

This case shows that shearing of the guide wire is an unusual but important complication of EUS guided rendezvous procedure. The complication can be avoided if rotation is undone before any attempt is made to pull out the guide wire through the needle during manipulation. If counterclockwise rotation is being done during manipulation of the guide wire slight clockwise rotation should be done before attempting to pull back the guide wire. If the wire must be pulled back, this should be done cautiously and aborted at the moment any resistance is met.<sup>1</sup> Use of 0.025-inch wire may prevent this type of complication. The use of access needle (Wilson Cook) has been considered better for rendezvous procedure, but in this case it did not prevent this complication.

### REFERENCE

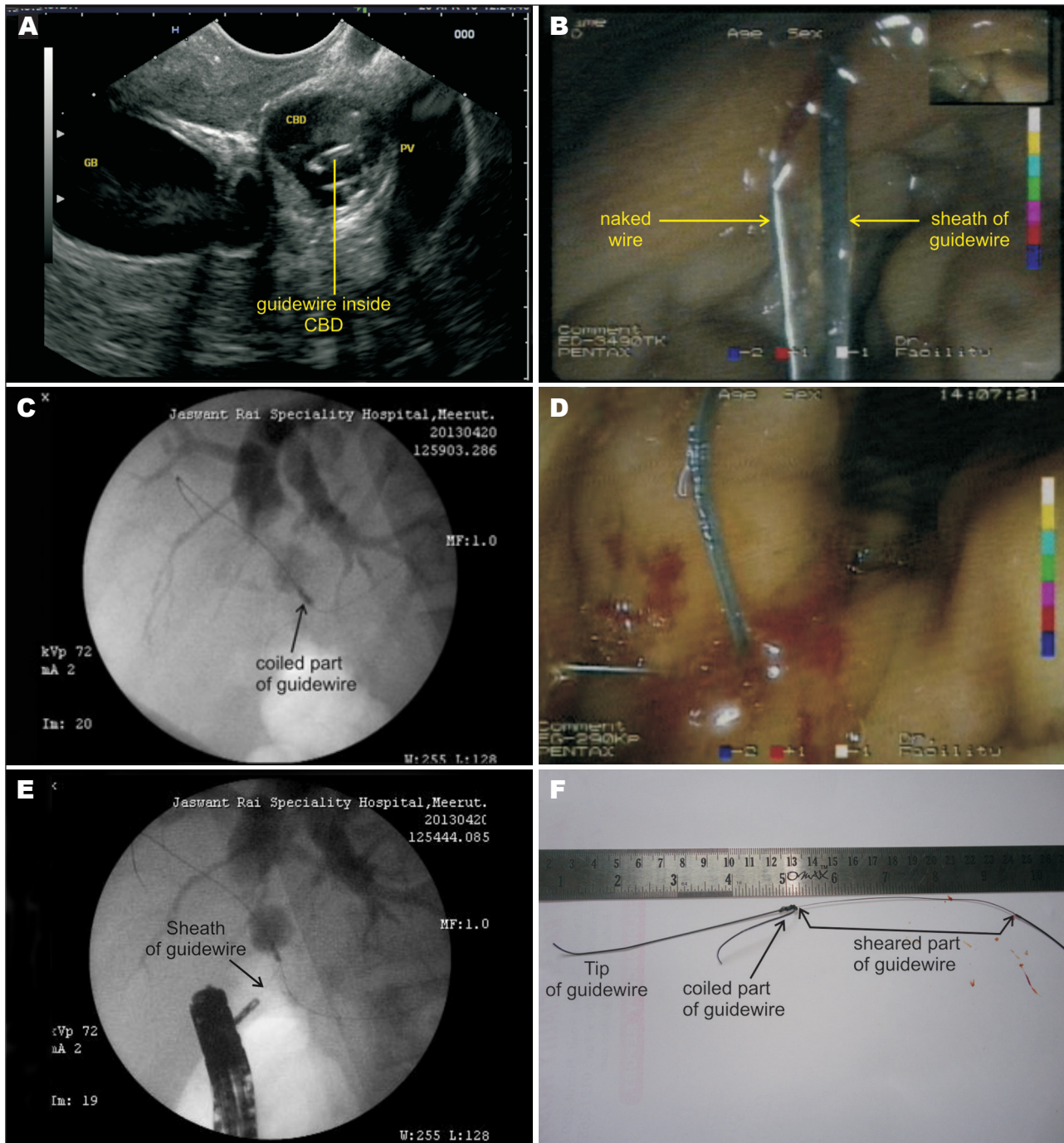
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**Figure 1.** A: A guide wire was introduced into the common bile duct (CBD) from the first part of the duodenum by 19 gauge access needle; B: The naked wire and sheath of the guide wire are seen separately coming out of the duodenal wall; C: The coiled part of the guide wire is seen just beyond the entry point in the lumen of CBD; D: The sheared part of the guide wire and the guide wire sheath are seen separately; E: The guidewire sheath is pulled back by biopsy forceps; F: The guide wire after removal from inside the CBD