CASE STUDY

Exceptional Deliverability of the Expel™ Drainage Catheter With Twist-Loc™ Hub

BY R. DANA TOMALTY, MD

CASE DESCRIPTION
A patient presented with a staghorn calculus, a large stone that takes up more than one branch of the collecting system in the renal pelvis (Figure 1). The upper pole calyx was completely filled with stone.

Initial access in the lower pole of the kidney was achieved, but the surgeon wanted upper pole access as well. Using the Seldinger technique, we placed a wire into the upper calyx. The fit of the wire was extraordinarily tight, as the upper calyx was almost entirely filled with stone (Figure 2). Any catheter that we pushed into that zone would meet very high friction and resistance, so we opted for a nephrostomy drainage catheter with robust column strength and buckling resistance.

We chose to use the Expel™ Nephrostomy Drainage Catheter with Twist-Loc™ Hub based on its deliverability profile. The tip taper of the Expel™ Catheter and its metal cannula, which is flexible enough but stable, allowed us to place a nephrostomy tube in the difficult stone-filled area in the renal pelvis (Figure 3). The hydrophilic coating on the distal third of the catheter also helped with insertion and deliverability. Compared with other drainage catheters on the market, the Expel family has consistently performed very well at our institution.

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Results from case studies are not necessarily predictive of results in other cases. Results in other cases may vary.
EXPEL™ DRAINAGE CATHETERS

CAUTION: Federal law (USA) restricts this device to sale by or on the order of a physician. Rx only. Prior to use, please see the complete “Directions for Use” for more information on Indications, Contraindications, Warnings, Precautions, Adverse Events, and Operator’s Instructions.

INTENDED USE / INDICATIONS FOR USE: Expel™ MPD™ and MPDL Drainage Catheter and Kit & Expel Large Capacity Drainage Catheter: The drainage catheter is intended to provide percutaneous drainage of abscess fluid collections. Expel Nephrostomy Drainage Catheter and Kit: The drainage catheter is intended to provide external drainage of the urinary tract.

CONTRAINDICATIONS: The drainage catheter is contraindicated where percutaneous drainage catheterization is unacceptable. For Expel Large Capacity, the drainage catheter is contraindicated where large diameter (≥16F) percutaneous drainage catheterization is unacceptable. WARNINGS: Do not use catheter for feeding tube/gastrostomy procedures. Exposure to gastric fluids may damage the catheter. Not for bilo-pancreatic use.

PRECAUTIONS: These recommendations are meant to serve only as a basic guide to the use of this catheter. Percutaneous drainage should not be undertaken without comprehensive knowledge of the indications, techniques, and risks of the procedure. Where long-term use is indicated, it is recommended that indwelling time not exceed the following limits, and that the physician evaluate the catheter before this time has elapsed: 90 days, for Expel MPD and MPDL Draining Catheter and Kit; 30 days, for Expel Nephrostomy Drainage Catheter and Kit. Catheters attached to suction should follow normal clinical practices in selecting a static vacuum level. Testing has demonstrated the catheters can withstand a negative pressure of 200 mmHg (26.7 kPa).

ADVERSE EVENTS: The complications that may result from the use of these devices include, but are not limited to: Catheter Occlusion and/or Dislodgment • Encrustation • Fistula • Hemorrhage/Hematoma • Infection/Sepsis • Pain • Perforation • Parotitis • Pneumothorax

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