available and re-usable. In our hands, the needle is placed blindly, but this method can be performed under laparoscopic vision. The technique is straight-forward to learn.

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Creating retroperitoneal space for retroperitoneoscopy using RÜSH® bladder hydrodistension catheter

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BACKGROUND

Creating a retroperitoneal space is an important early step in retroperitoneoscopy.¹ Commercially, there are balloon-dissection devices designed for this purpose (Auto Suture; Tyco Healthcare, Norwalk, CT, USA). However, we describe the use of a disposable 16 Ch RÜSH® bladder hydrodistension catheter (RÜSH Inc., High Wycombe, Bucks, UK) as a cheap, safe and effective alternative (Fig. 1).

TECHNIQUE

The patient is placed in the lateral decubitus position. A small incision is made below the tip of 12th rib into the retroperitoneal

Figure 1 RÜSH® hydrodistension catheter and 60-ml catheter syringe

space. The catheter, with a maximum balloon capacity of 1500 ml, is guided by a finger into the retroperitoneum. A total of 800 ml of normal saline is instilled into the catheter using a catheter syringe. The saline is then aspirated with suction, and the catheter removed, before laparoscopic ports are inserted.

DISCUSSION

We have completed 40 retroperitoneoscopies (22 nephrectomies, 10 pyeloplasties, 8 ureterolithotomies) using this technique, and adequately created retroperitoneal space in all cases. There were no peritoneal injuries or complications. Balloon rupture occurred in one patient, the fragments were easily retrieved retroperitoneoscopically. The catheter has significant cost benefit over the balloon-dissection device – £56.79 versus £164.97, respectively. Furthermore, the hydrodistension catheter is licensed for intracorporeal inflation with saline up to 1500 ml; alternative methods described using a surgical glove finger tied to the end of a catheter¹ or Foley catheter balloon² are not. The catheter is made of latex, so caution should be taken for possible latex allergy. In conclusion, we have found this to be a safe and cost-effective technique for establishing the retroperitoneal space prior to laparoscopic surgery.

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