SURGICAL TECHNIQUE

USE OF FOLEY’S CATHETER TO GAIN ACCESS FOR RETROPERITONEOSCOPY

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With the increasing popularity of laparoscopic urologic surgery, many different methods have been used to dissect the extraperitoneal space and gain access to the kidney and ureter. We present our initial experience using a Foley catheter to gain retroperitoneal access. This technique was successfully used in 30 children. We have not encountered any major complications and recommend its use in children.

Key words: Foley’s catheter, retroperitoneal access.

INTRODUCTION

Retroperitoneoscopy had been difficult because of the inability to effectively create a space within the dense retroperitoneal fat. Balloon dissection was introduced in 1992. Many variations of this technique have been proposed, but none have been perfect. Recently we have used the balloon of a Foley catheter to create this space in children.

MATERIALS AND METHODS

Retroperitoneal laparoscopies were carried out in 30 children over a period of 4 months using this technique. The mean age was 5.4 years (2.2 months–15 years). Twenty-three children underwent nephroureterectomy, two had laparoscopic deroofing of renal cysts, four children had heminephrectomies and one had a renal biopsy. Three laparoscopic ports, one 5 mm and two 3 mm, were used for each operation. The children were placed in the lateral decubitus and the retroperitoneum was accessed by blunt dissection through a 5–10 mm lumbodorsal incision, located in the angle between the lateral border of the paraspinal muscles and the 12th rib. A size 16-Fr Foley catheter was introduced through the incision and the balloon was inflated with 80–100 cc of air. Inflation was maintained for 30 s; the catheter was deflated and replaced with a 5-mm port. The remaining ports were placed after creating enough working space by blunt dissection.

RESULTS

All the procedures were successful using this technique. All 30 children stayed in hospital overnight only and returned to normal activity within a week.

DISCUSSION

Retroperitoneal laparoscopy provides direct access to the retroperitoneal organs and avoids the potential complications of transperitoneal laparoscopy. However, the main disadvantage of this method has been in the access and creation of the retroperitoneal space. The original description of using a glove finger

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