Laparoscopic repair of vesicouterine fistula—a case report

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Abstract We report the technique of laparoscopic repair of vesicouterine fistula. A 30 year old lady presented with incapacitating cyclical pain for one and a half years. She had undergone cesarean section 18 months ago. She was evaluated by a CT scan of abdomen and pelvis followed by a cystoscopy and diagnosed to have a vesicouterine fistula. This was managed laparoscopically (laparoscopic disconnection of fistula; closure of bladder and uterus rent; and omental interposition). There were no intraoperative or postoperative complications. Follow up CT scan of abdomen and cystoscopy revealed good healing of the repaired area. Laparoscopic repair of vesicouterine fistula is a feasible procedure.

Keywords Vesicouterine fistula · Laparoscopy

Introduction

Vesicouterine fistula usually presents with cyclical pain and hematuria. We present the technique of laparoscopic repair in a 30-year-old woman with cyclical lower abdominal pain and dysuria.

Case report

A 30-year-old woman presented with incapacitating cyclical lower abdominal pain since a cesarean section done one and a half years ago. There was no cyclical hematuria. Clinical examination revealed a lower midline scar and vague tenderness in the lower abdomen. Computed tomography (CT) urogram revealed a fistulous communication between the posterior wall of the bladder and lower segment of the uterus, and incidentally, a complete duplication of the left ureter was noted (Fig. 1). Cystoscopy showed the presence of an opening in the supravaginal area with double ureteric orifices on the left side. In view of the severe pain, laparoscopic intervention was planned.

Patient was placed in the lithotomy position. Methylene blue was injected transcervically, and a cystoscopy was done (Fig. 2). This confirmed the fistula in the supravaginal area. Using four ports (10-mm supraumbilical camera port, pararectal 5-mm ports on either side, and a right flank port for hand instruments; Fig. 3), dissection was started in vesicouterine fold. Bladder was densely adherent to the uterus, which was released. The fistula was disconnected and excised. The uterine wound was closed horizontally with few interrupted sutures of 2–0 polyglactin (Fig. 4). Omental tacking was done onto the anterior wall of uterus below the suture line (Fig. 5). Subsequently, edges of the bladder wound were trimmed and closed with 3–0 interrupted polyglactin sutures (Fig. 6). The bladder was distended with saline to make sure that there was no significant leak. A tube drain was introduced through the right flank port. Bladder was drained by a 22-size foley catheter.