Spontaneous Cure of Migrated Peritoneal Catheter

“Catheter migration” refers to displacement of the peritoneal dialysis (PD) catheter from the pelvis to the upper abdomen; migration typically results in PD failure and may require catheter removal (1). Currently, the common management technique is to reposition the catheter—either manually, by laparoscopy, by using a Fogarty balloon catheter, or by a surgical procedure. Spontaneous cure of a migrated catheter is rare. We report one such observation in a patient with diabetic end-stage renal disease on PD.

CASE REPORT

A 53-year-old patient with diabetic end-stage renal disease had a double-cuffed swan-neck PD catheter placed surgically. The catheter tip was placed in the pelvis, and the cuff was fixed at the rectus sheath. Abdominal radiography on the following day showed that the tip of the catheter had migrated to right subhepatic region. No omental wrapping was apparent on computerized tomography (Figure 1). After a break-in period of 2 weeks, the patient was started on 3 PD exchanges daily. There was no pain during infusion or drainage, and no problem with drainage. Aggressive laxatives were not prescribed, and no catheter manipulation was attempted. At the end of 2 months, follow-up radiography of the abdomen showed that the catheter tip was in the pelvis.

DISCUSSION

Migration of the PD catheter is a troublesome complication that can impair dialysate outflow. It is reported to occur in 12.7% – 35% of patients (2). Surgical revision is required in 85% – 90% of cases (3,4). Three patterns of migration have been described. In the first, the catheter tip points laterally against the abdominopelvic side wall. In the second, the catheter tip points superiorly toward the hypochondrial region. In the third, the catheter tip loops back on itself. In our patient, the second pattern of catheter migration was seen.

Truncal obesity, a downward or right-sided tunnel direction, the absence of peristalsis or the presence of small-bowel ileus, and constipation are some of the factors that predispose to catheter migration. The catheter type may also influence migration. Catheters such as the coiled Tenckhoff, the Toronto Western catheter, the Life catheter, and the swan-neck Gortex catheter are associated with less migration (5). Typically, a migrated

Figure 1 — Coronal section of computerized tomography of abdomen showing catheter (solid arrow) in subhepatic region (dotted arrow indicates the liver) and no omental wrapping.

catheter needs a corrective procedure; spontaneous cures are rare (4).

The suggested procedures for repositioning a migrated catheter can be nonoperative or operative. Nonoperative procedures include Fogarty catheter manipulation and Foley catheter stylet or guidewire manipulation. Surgical repositioning can be done in either an open or a laparoscopic procedure (1,4,5).

In our patient, the peritoneal catheter functioned well despite migration to the subhepatic region. The catheter was subsequently found to have relocated to the pelvis despite the absence of any manipulation or aggressive intervention, or even use of laxatives.

DISCLOSURES

The authors have no financial conflicts of interest to disclose.

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