

Spontaneous Migration of a Surgical Clip Following Partial Nephrectomy

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INTRODUCTION

Migration of surgical materials into the urinary tract is a rare condition. We present a case of spontaneous migration of a metal clip into the ureter 9 years after upper pole partial nephrectomy.

CASE REPORT

A 48-year-old woman presented with a sudden right flank pain radiating to her right groin. She was found to have a 5-cm upper pole angiomyolipoma of the right kidney 9 years earlier. Therefore, she had undergone open partial nephrectomy. Violation of the collecting system had been repaired using a 3-0 Vicryl. Tightness had been checked by administering Indigo carmine through a ureteral stent. Surgical bed hemostasis had been achieved by 2-0 Vicryl running sutures and automatic nonabsorbable surgical clips (Autosuture Premium Surgiclip). The parenchymal bed had been then covered by absorbable bolsters. The postoperative course was uneventful

and the patient had been discharged from the hospital.

Plain radiography of the kidney, ureter, and bladder demonstrated a 4-mm opacity projected over the pelvic portion of the right ureter as well as multiple additional small opacities bordering and within the partial nephrectomy site (Figure 1). Spiral abdomino pelvic computed tomography scan confirmed the diagnosis of right renal colic following migration of a



Figure 1. Kidney, ureter, and bladder x-ray showing surgical clips projected within the partial nephrectomy area and the right distal part of the ureter.

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Figure 2. Spiral pelvic computed tomography scan demonstrating a 4-mm opacity in the lumen of the right pelvic ureter.

surgical clip (Figure 2). The patient was managed conservatively with hydration and narcotic analgesia. Few days later, the patient passed the clip spontaneously.

DISCUSSION

Migration of clips into the common bile duct has been previously reported in several laparoscopic cholecystectomies.^(1,2) Furthermore, it has been reported that surgical clips can act as a nidus for stone formation when they are in contact with urine.⁽³⁾ In this patient, nonabsorbable surgical clip has probably eroded into the collecting system. A similar case with absorbable Lapra-Ty suture clips (Ethicon Endosurgery, Cincinnati, Ohio) has been reported by Miller and colleagues.⁽⁴⁾ Several cases of surgical clip migration into the bladder following retropubic radical prostatectomy have been reported.⁽⁵⁾

Long and associates reported a 61-year-old man who had undergone radical prostatectomy for

localized prostate cancer. The postoperative course was marked by recurrent urinary retention and several urethrotomies failed to restore spontaneous voiding. A clip was finally visualized and removed by endoscopy.⁽⁶⁾

Metal clips may migrate postoperatively and cause secondary complications. Therefore, they should be absorbable and applied selectively over vessels and far from the collecting system.

CONFLICT OF INTEREST

None declared.

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