CASE REPORT

RETAINED GAUZE PIECE RESULTING IN RIGHT RENAL COMPLEX CYST DIAGNOSED AFTER 4 YEARS OF PYELOLITHOTOMY

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Renal cysts are the most common space occupying lesions of kidneys. These may be simple or complex. Complex renal cysts are suspicious for malignancy. Computed tomography is the gold standard in diagnosis of complex renal cysts. Negligence resulting in retained surgical foreign bodies does occur in our setup and world over. We present a unique case of retained gauze piece presenting as complex renal cyst, diagnosed four years after pyelolithotomy. A 50 year old male presented with history of on and off right lumbar pain for the last one year, along with low grade intermittent fever and weight loss. Past history revealed that he was operated for renal stones four years ago. Radio imaging including ultrasonography and CT scan revealed complex renal cyst. Patient was explored and found to have thick walled cyst with old gauze in it.

Keywords: Retained gauze, pyelolithotomy complication, complex renal cyst
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INTRODUCTION

A renal cyst is a pouch of fluid filled sac that develops within the kidneys. Cysts may be simple or complex and form the most commonly occurring space occupying diseases of the kidneys.[1] These are different from the cysts that develop in polycystic kidney disease. Simple cyst is a round, fluid filled space with regular lining of walls. Most simple cysts are asymptomatic[1] except those that develop complications (2–4% of the cases).[2]

When walls or contents of the cyst are irregular, the cyst is called complex cyst. These may include septations, calcification or solid enhancing material and have a risk from 13% to 90% of developing cancer.[3] Bosniak classification may be used for complex cysts. Computed tomography is the gold standard in diagnosis of complex renal cysts.[4] Contrast enhanced ultrasonography may be employed as well with good outcomes.[4]

Negligence resulting in retained surgical foreign bodies does occur in our setup and world over. Surgical sponge is often the most common retained foreign body after surgical procedures, leading either to abscess or mass formation.[5] We present a unique case of retained gauze piece presenting as renal complex cyst, diagnosed four years after pyelolithotomy.

CASE REPORT

The patient, 50 years old male, was admitted on 9th January, 2014 in Armed Forces Institute of Urology, with presenting complaints of right lumber pain which was dull in character, for the last one year. It was accompanied with low grade intermittent fever and weight loss. No other urinary and systemic complaints were present. Patient had undergone right pyelolithotomy at a private setup, four years back.

On abdominal examination, there was a scar of previous surgery at right lumber area and mild deep tenderness was present on palpation. No other systemic abnormality was found.

Laboratory investigations showed no significant abnormality and serology for hydatid disease was negative. Radio imaging including Ultrasound CT Urogram showed suspicion of right complex renal cyst involving lower pole of the kidney (Figure-1).

On exploration, a large extra renal cyst with haemorrhagic fluid was found. The cyst was found to be containing gauze as a foreign body. Gauze pieces were removed and cyst wall was removed in toto (Figure-2).

Cyst wall was sent for histopathology which showed fibrous tissue with chronic inflammation. Post-operative period was uneventful and patient was discharged on 16th January, 2014.

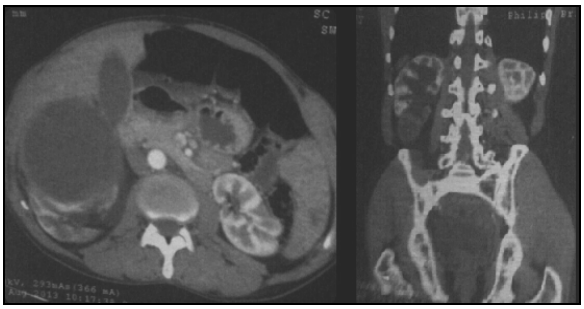

Figure-1: Huge cystic lesion with non-enhancing septations causing right moderate hydronephroureter

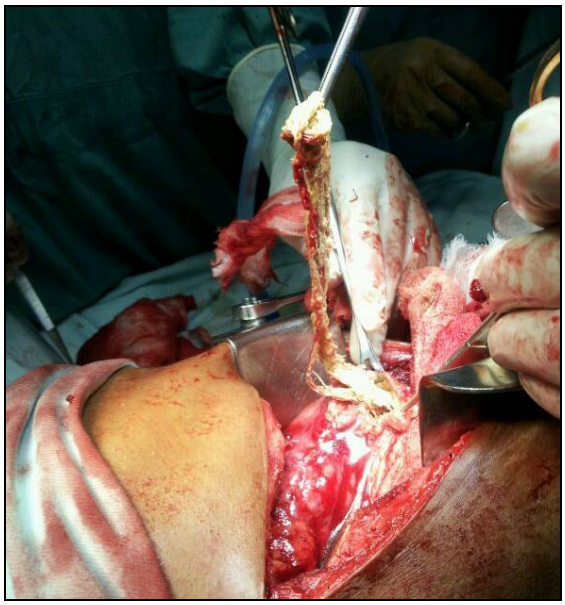

Figure-2: Exploration of the renal cavity and removal of gauze piece with cyst wall

DISCUSSION

Surgical gauze retained after surgery, technically known as "gossypiboma" is a rare but not unheard complication after surgery, occurring solely due to human error. Risk factors for this malpractice are emergency procedures and long duration of procedures.[6] These may be asymptomatic and blend with surrounding tissues on plain abdominal films[7], making diagnosis difficult for the clinicians afterwards. Clinicians need to be astute enough to pick such cases, because such occurrences create havoc for the patients, doctors and even the hospitals.

Complete clinical evaluation, proper record keeping before, during and after the operations, regular follow up and good communication with the patients are all necessary and integral to avoid such errors.[8] Paying proper attention towards double counting the sponges is absolutely necessary.

Studies indicate that apart from sponges being forgotten during surgeries, they are also forgotten during making diagnosis afterwards for complaints of the patient.[9] Thus negligence may occur during surgery and also afterwards in addressing the complaints of the patient. Many surgical foreign bodies do not produce any symptoms. The body produces inflammatory reaction in response to the foreign body. Patients may present with nausea, vomiting, fever, anorexia, weight loss, palpable mass, bleeding or altered bowel habits.[10] There may be evidence of abscess or fistula formation.[10]

Retained surgical foreign bodies may be easily missed on plain X-rays and must be further investigated with ultrasound, CT scan or MRI. Rounded mass with dense central part and enhancing walls is often observed on CT scan.[5] This diagnosis must be kept in mind in cases with unexplained symptoms, which have previous history of surgery. This signifies the role of proper history taking as well and establishing good communication with the patient. Removal is the usual treatment for retained foreign body. Previous operative site may be reopened or newer modalities like endoscopic or laparoscopic modalities may be used as well.[5] Complications such as haemorrhage and perforation of surrounding structures may occur as well during removal of such foreign bodies.[5] Standard procedures must be developed and followed in letter and spirit to prevent such episodes in the hospitals.

CONCLUSION

Acts of negligence during surgery may prove disastrous for the patients, ruining their health and life. Surgeons need to be vigilant enough to prevent such events. Retained surgical foreign bodies are not easy to diagnose and must be kept in mind when making diagnosis in patients who have undergone previous surgeries.

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