Case study

LOW RESIDUE DIET & CODEINE MAY SUBSTITUTE FAECAL DIVERSION IN CONSERVATIVE MANAGEMENT OF PATIENT WITH RECTOURETHRAL FISTULA - A CASE REPORT

ABSTRACT

AIMS: We present a patient that developed rectourethral fistula following prostatectomy for a misdiagnosed prostate cancer. He was managed conservatively without faecal diversion.

CASE PRESENTATION: A 65 year old man presented to our hospital with a year history of lower urinary tract symptoms. He was evaluated and diagnosed to have BPH. Serum PSA was wrongly reported to be 0.9ng/ml. He had open prostatectomy. On the 6th post-operative day, he developed faecaluria. Rectal examination revealed a fistula, admitting tip of the index finger. Histology revealed adenocarcinoma. He had bilateral total orchidectomy a week later, but refused surgical repair of the fistula and urinary or faecal diversion. He was maintained on urethral catheterization, low-residue diet and codeine.

DISCUSSION: The codeine and low residue diet made him constipated. Faecaluria stopped, fistula closed within 3 months. He however developed bladder neck contracture after a year.

CONCLUSIONS: In some selected cases, low residue diet and the use of codeine can replace faecal diversion in managing rectourethral fistula; this can save the patient from the agony of having colostomy, only for the fistula to recur later.

KEY WORDS: Rectourethral fistula, low residue diet, faecal diversion, codeine.

INTRODUCTION

Rectourethral Fistula (RUF) is an abnormal tract that connects the rectum with the urethra. It can rarely complicate open prostatectomy. It is a very rare and devastating disease [1]. Epidemiological data and standard algorism for its management are also lacking due to the rarity of the disease [1]. Culp & Calhoon [2] had described about five basic groups of this fistula. It is mainly according to the etiology of the fistula. They described: congenital, iatrogenic, traumatic, neoplastic and inflammatory.

Most of the literature on its management are retrospective studies inform of case reports and series [3]. Tiptaft et al. [4] reported a series of 23 patients, 2 of which resulted from an open prostatectomy. Treatment is challenging and surgical repair is required in most cases [5].

Several surgical techniques have been described to treat it, including transsphincteric, transanal, transabdominal and transperineal [6].

In some few instances however, the fistula may close spontaneously after faecal and urinary diversion [6].

We herein present a patient that developed RUF following open prostatectomy and was managed conservatively without even fecal diversion.

CASE PRESENTATION

A 65year old patient presented to our clinic with lower urinary tract symptoms of 1 year duration. These symptoms waxed and waned and later he had an episode of acute urinary retention that was relieved by urethral catheterization. There was no history of trauma or urethral instrumentations and no history suggestive of urethritis in the past. However he gave a history of lower back pain but no weakness of lower limbs.

The only positive finding on physical examination was an enlarged nodular but firm prostate. Abdominal/Transrectal Ultrasound scan revealed an enlarged prostate of about 66g; it showed uniform echotexture and intact capsule. There was thickening of the bladder wall but no upper tract dilation. Serum Prostate Specific Antigen (PSA) was reported as 0.9ng/ml; electrolytes and urea, full blood count and other laboratory investigations were all within normal limits.

Diagnosis of Benign Prostatic Hyperplasia (BPH) was made and he was counseled on both open prostatectomy and Trans Urethral Resection of the Prostate (TURP) but he chose open prostatectomy, because he could not afford the TURP. He was prepared and had the surgery with some difficulty in enucleating the prostate. On the sixth postoperative day, he developed faecaluria and fistula was found on rectal exam admitting just the tip of the index finger. The histology of the enucleated adenoma also revealed an adenocarcinoma and a repeat PSA was 22ng/ml.

The patient was counseled for surgical repair of the fistula but he refused. He also refused urinary and faecal diversions, but accepted bilateral total orchidectomy which he had.

We then placed him on silicone catheter for continuous bladder drainage, low residue diet, antibiotics and analgesics (initially Non-Steroidal Anti-Inflammatory Drugs (NSAID) but later codeine was added due to severe back pain he was having despite NSAID).

The codeine made him constipated and this helped in stopping the faecoluria. He had manual evacuation of faeces in three occation due to the constipation. The fistula healed within 16 weeks. Retrograde Urethrography (RUG) done revealed no extravasation of the contrast.

He had bladder neck incision a year later due to bladder neck contracture.

DISCUSSION

The main stay of treatment for rectourethral fistula is surgical repair. This is because spontaneous closure is very rare [7]. Various surgical techniques have been described to treat this disease and to date there is no single preferred surgical technique for its management [6].

In this paper, a rare case of rectourethral fistula following open prostatectomy is reported. The patient refused primary surgical repair, forcing us to manage him conservatively. For rectourethral fistula to be managed conservatively, it often requires faecal and urinary diversion [6, 8]. Again our patient refused faecal and urinary diversion. Such patient should ideally be managed with Total Parenteral Nutrition (TPN), urethral catheterization and antibiotics [9]. However in developing countries like ours, TPN is often not available or too expensive for many patients to afford. In our institution, TPN is not available. We therefore placed the patient on a low residue diet, antibiotics and a silicone urethral catheter for continuous bladder drainage. He was also placed on codeine for his lower back pain due to failure of NSAID to control his pain. The codeine made him constipated, coupled with the low residue diet. These acted like a faecal diversion as he opened his bowel once in a week and sometimes once in 10 days. In three instances he had to undergo manual evacuation of the faeces. Due to the constipation and the urethral catheter, neither faeces, nor urine was passing through the fistula and these allowed the fistula to heal. RUG done 17 weeks later revealed no extravasation of contrast. His repeat PSA at 3 months was 0.01ng/ml. He was followed up for about 3 years and the only complication he developed was bladder neck contracture for which he had endoscopic bladder neck incision.

CONCLUSION

In some selected cases, especially in developing countries, low residue diet and the use of codeine can replace faecal diversion in managing rectourethral fistula; this can save the patient

from the agony of having colostomy, only for the fistula to recur later. However a well designed clinical trial might be needed to confirm this finding.

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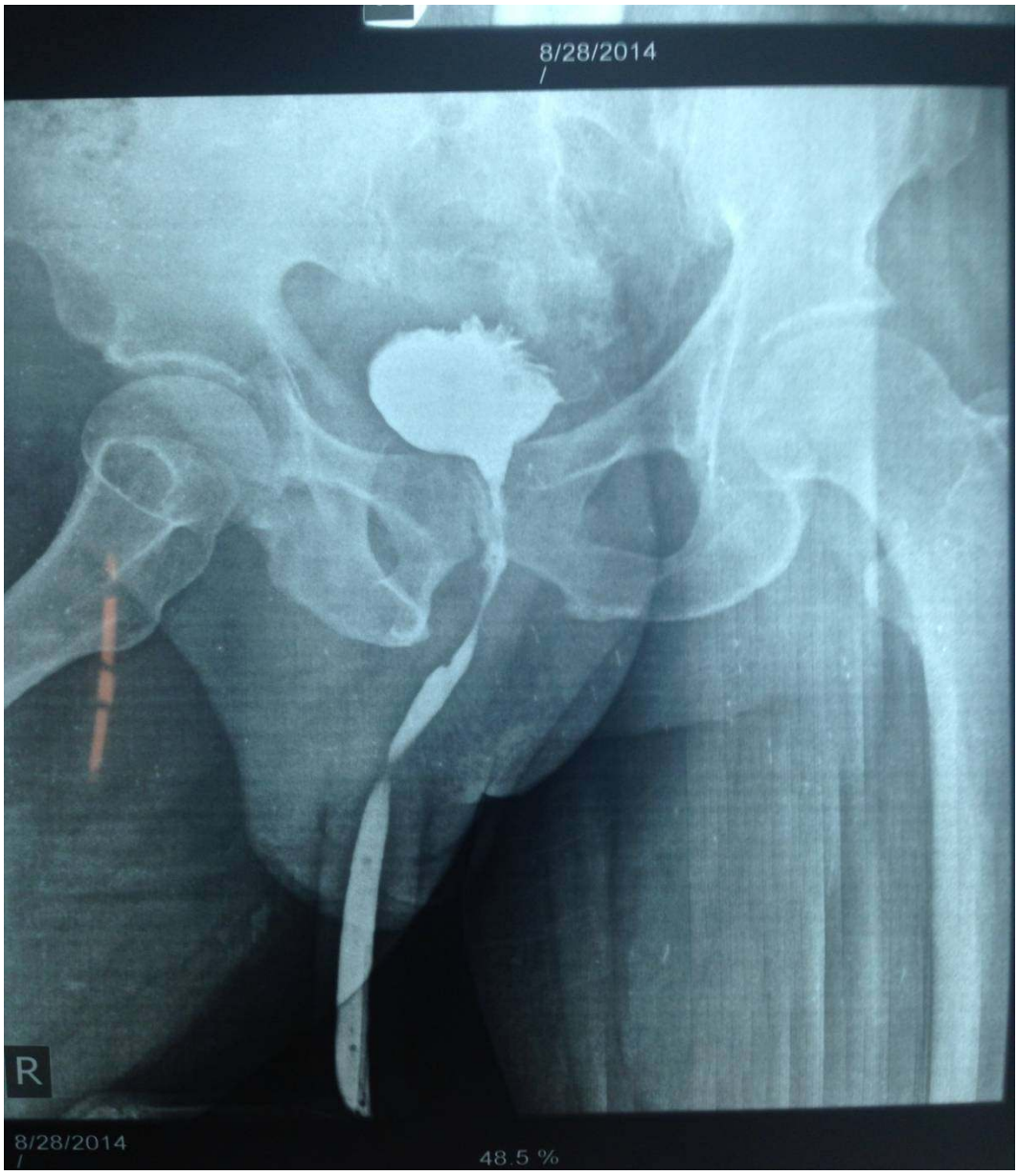
APPENDIX



RUG of the patient showing no extravasation of contrast.

CONSENT: I certify that full consent of the patient was obtained

LIST OF ABBREVIATIONS

RUF – RECTOURETHRAL FISTULA

BPH – BENIGN PROSTATIC HYPERPLASIA

PSA – PROSTATE SPECIFIC ANTIGEN

RUG – RETROGRADE URETHROGRAM

TPN – TOTAL PARENTERAL NUTRITION

NSAID – NON-STROIDAL ANTI-INFLAMMATORY DRUGS

TURP – TRANSURETHRAL RESECTION OF THE PROSTATE