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THE CHALLENGES OF A PROSTATECTOMY IN RURAL AFRICA
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SUMMARY

Delayed complications of an established surgical procedure like transvescical prostatectomy can occur in rural settings, where different factors can influence the outcome, beyond appropriate indication for surgery and technical skills of surgeons. Here we present a case that was per se surgically unremarkable, however a number of delayed omplications appeared in the post operative period, including infectious, neurologic, metabolic, hematologic ones, beyond purely post-surgery complications.

INTRODUCTION

Patient baseline conditions and local resources can play a key role in affecting the outcome and the risk/benefit assessment and should be taken in particular account when considering prostatectomy in rural setting.

CASE REPORT

An elderly male was admitted in Chaaria Hospital for important symptomatic prostate hypertrophy; the patient was also catheterised since several months.

We performed an open transvescical prostatectomy (TVP) according to Freyer (1), since we have no facilities for trans-urethral prostatectomy. The operation appeared overall surgically unremarkable with minimal bleeding.

The following day, palpitations and arrhythmia were noted, and we diagnosed an acute episode of atrial fibrillation which was not present preoperatively. We could treat him with digoxin and the fibrillation disappeared within 24 hours.

DISCUSSION

The continuous wash-out was working properly without clots, however we started observing some fluid in the suvrapubic drainage. On day three post-surgery the patient developed acute psychosis, which at the beginning was considered likely due to spinal anaesthesia, but largactil for sedation did not improve it. On day five post-surgery the patient was restless and unconscious; the creatinine levels previously normal went up to 3 g/dl, accompanied by GOT 350 U/l, GPT 365 U/l.

The patient developed some hematomas in hypostatic areas, and the Hb from initial 13 post-operatively dropped to 5 g/dl without evidence of hematuria. The patient received three units of blood and prophylactic enoxiparine was stopped.

In parallel, we observed important hyponatremia of 128 mEq/l which we corrected, aiming to revert the unconsciousness and restlessness possibly consequent to electrolyte imbalance and cerebral oedema. When sodium was normalised, the conditions of our patient improved, with GOT and GPT gradually reverting to normal and also creatinine, which however stabilized around 2 g/dl.

We could eventually remove the stitches, the suvrapubic drainage and the urinary catheter on day ten post surgery.

However, on day thirteen post surgery, fluid leakage from the sovrapubic drainage site was noted, and we decided to reinsert the catheter. We would normally expect the urinary fistula to close completely in presence of a working drainage.

Meanwhile the general conditions continued to improve, despite the patient was still anemic with Hb of 7 g/dl. We also observed intermittent episodes of fever, although the patient had been on antibiotics from the day of the operation. To further bias the interpretation of fever, during the hospitalisation the patient had two malaria episodes, for which received quinine and then artenam i.m. respectively.

We observed that the urinary fistula was not improving and by U/S we realised that the catheter was malpositioned, lying between bladder and

rectum. We decided to reposition the catheter in the bladder under direct observation and in general anaesthesia. This allowed also a surgical toilet of the prostatic lodge which was purulent, and justifying the fever.

The patient further improved and is now doing well and the fistula is closing. The wound still showed mild signs of flogosis and we kept the catheter for additional two weeks, to allow better infection healing and fistula closure.

Despite prostatectomy is a well established surgical procedure, and TVP still remains a valid surgical option in rural environments where advanced techniques for transurethral resection of the prostate and laparoscopic prostatectomy are not available, the post-surgical period proves to be the most difficult and challenging in rural setting, as complications are frequent in certain patients and can arise at any time (2), often early but also up to several weeks post-surgery like our case demonstrates. The most common complication is certainly bleeding, but also urinary fistula is not uncommon and can be quite challenging. In addition, as these patients are generally elderly and frail we can expect also medical complications, given the often impaired metabolism of the patient. Therefore the decision on performing a prostatectomy should never be underestimated and should take into consideration not only the risk/benefit of the surgical procedure itself, but also the delayed complications of it, the baseline conditions of the patient and the availability of supportive medical treatment.

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