

Research Article

Penile Implant Surgery; Short Outcome Complications

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Abstract

Purpose: This study aims at evaluating short outcome complications of the penile prosthesis surgery in patients with refractory erectile dysfunction. **Patients and methods:** This study is prospective study, It includes 20 patients entered the study from a total 30 patients having ED and attended the out patient clinic at Minia university hospital in the period from December 2013 to December 2014. All patients subjected to penile prosthesis surgery and were evaluated for short outcome of surgery. **Results:** Intra-operative complication in the form of corporal cross over is the only intraoperative complication that happen in one patient who was 50 years old, postoperative complication occur in 1 patient in the form of early postoperative infection in the first couple weeks and this patient is diabetic. **Conclusion:** All patients must be informed of all possible complications (intra operative and postoperative complications especially the infection which may need salvage procedure and reinsertion surgery.

Key words: outcome, penis, Prosthesis, implants, intraoperative and postoperative complications.

Introduction

The history of implantable devices for erectile dysfunction dates back to 1930's^[1]. In 1936, Borgas inserted costal cartilage into the phallus to provide rigidity^[1]. By the 1960's, rubber silicone rods were placed between the tunica albuginea and Buck's fascia of the penile septum^[1].

The next significant step in the development of the penile prosthesis was in 1973, Hernan Carrion developed a silicone-based prosthesis^[1]. Nowadays implanting a penile prosthesis is the definitive solution for the treatment of organic erectile dysfunction (ED), even in the era of effective and safe oral medications^[4]. The types of prosthesis most commonly implanted are the three-piece inflatable device, the twopiece inflatable device, and the malleable prosthesis. In the last few years, the threepiece inflatable device has been used for preference, as it improves the erection, the appearance of the penis and as it yields a more acceptable and cosmetical functional result^[2]

Patients and methods

This study is prospective study, It includes 20 patients entered the study from a total 30 patients having ED and attended the

outpatient clinic at Minia university hospital in the period from December 2013 to December 2014. The other 10 patients, 3 patients were not fit for surgery, 6 patients improved in home ICI therapy and 2 patients refuse the concept of surgery.

All patients subjected to complete clinical examination with special emphasis on analysis of ED, possible etiology in addition to laboratory investigations in the form of Fasting and Post prandial sugar done in all cases, if diabetic patient, HbA^{1c} done and Hormonal evaluation in the form of Serum testosterone (free, total), also Penile Duplex ultrasound was done to every case.

Preoperative counseling with all patients about other alternative modalities, different types of the penile prosthesis, surgery related complications and informed consent in obtained. All complications were informed as infection, penile deformity and if there is need to exchange the device later on. All patients provided a written consent.

All patients were operated with spinal anesthesia through penoscrotal incision, eighteen Genesis coloplast malleable prosthesis used and 2 Titan coloplast inflatable prosthesis in two cases. The girth

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in malleable prosthesis was 9.0 mm in 1 patients, 11 mm in 1 patients and 13 mm in 2 patients.

The patient was seen in the postoperative period at least twice weekly.

Approximately, 4-6 weeks after implantation, patients were taught how to use the prosthesis. Patient instructed not to start intercourse before 6-8 weeks.

Sexual satisfaction was assessed using a structured satisfaction questionnaire administered at clinic follow-up (Bhojwani et al., 2000)

Results

The mean age in our series is 47 ± 14.29 years ranging from (28-70 ys) and duration of erectile dysfunction was 4 ± 2.01 year (ranging from 1-10 ys). The mean follow up duration in our series was 2.36 ± 1.02 months.

Corporal cross over is the only intraoperative complication that happen in one patient who was 50 years old. Postoperative complication occur in 1 patient, which was early postoperative infection in the first couple weeks and this patient is diabetic Mean Patient satisfaction score was 4.1 ± 0.71 .

Discussion

The treatment of ED has been revolutionized with the introduction of orally active phosphodiesterase inhibitors, which are successful in 70%-80% of men^[1]

In patients with severe ED, a penile implant is the only treatment that allows obtaining and maintaining a rigid erection. Currently available inflatable penile prosthesis (IPPs) has greatly improved mechanical reliability compared to earlier models [7].

The mean follow up in our study, was 2.36 ± 1 months which was not in comparable with the study done by Xu Jun Xuan et al.,^[1] in which the mean follow up was 39 months. This due to short duration of follow up in our study in comparison with the previous studies.

As regards to intraoperative complication, in our study only one patient (old age patient, type 2) had corporal cross over that easily recognized and corrected during the procedure, while in a study done by Bhojwani^[1], two intraoperative complications of total 26 patients with a percent 3.0%, one patient had a proximal corporeal body perforation and the other had a urethral tear.

Regards to postoperative complications in spite of NO touch technique in our study the infection occur only in one patients who is type I diabetes and may be also referred to lack of personal hygiene of the patient which occur in the first couple weeks and the incidence of infection was exactly similar to the data base obtained by Carson, in which infection occur in 2 patients of total 100 (2%).

As regards to patient satisfaction: In our study patient satisfaction score was 4.1 ± 0.71 , the percent of patients recommending the device for others was 90% and the percent of patients whom their sexual quality improved was 90% while patient satisfaction obtained by Bhojwani et al, (92%) of patients would recommend surgery to others, only 37/23 patient (62%) felt their sexual quality of life was improved, 11/23 patient (48%) felt their quality of life had remained the same while 2/23 (9%) felt their quality of life had decreased since the operation.

Conclusion

Good patient preparation is the most important factor in the success of the operation, Using No- touch technique decrease the incidence of postoperative infection. Patient and partner satisfaction is an important issue in the follow up visits.

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