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Penile Prosthesis

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ÖZET

Erektil disfonksiyon nedeniyle, 1988 ve 1990 yılları arasında kliniğimize başvuran 15 olguya değişik tiplerde penil protez implantasyonu gerçekleştirdik. Son 10 yıl içerisinde impotansın daha iyi anlaşılması ile birlikte tedavi olanakları arttı, bununla birlikte erektil disfonksiyonlarda penil protez uygulamaları da önem kazandı. Bu çalışmada kliniğimizde uygulanan penil protez implantasyonlarının sonuçları irdelenmektedir.

Anahtar Kelimeler: *Empotans, Penil protez*

SUMMARY

Penile protesis

For erectile dysfunction in between 1988 and 1990, we implanted different types of penile prosthesis to 15 patients in our clinic. In the last decade with a better understanding of impotence, the treatment armamentorium has expanded a great deal and as a result, penile prosthesis gained much more importance in the management of erectile dysfunction. In this study we discussed the results of penile implants.

Key Words: *Impotence, Penile prosthesis*

INTRODUCTION

In the past 10 years, vastly improvement in the evaluation and treatment methods has been due to much better understanding the physiology of erectile function and the physiopathology of the erectile dysfunction (1). The goal of evaluation is no longer solely the differetiation of psycogenic impotence from organic impotence, but also to establish specific organic etiology in 970 of impotent patients and more than %95 of these patients had specific organic disorder (1, 2). This progress has also provided the improvement of penile implants since they have been the main stays of treatment for erectile impotence. The success rate of penile prosthesis surgery is %90 and a reasonable length for coitus is achieved without negative effect on sensation, orgasm and ejeculation (3). We present 15 patients that we implanted AMS (American Medical Systems) penile prosthesis due to erectile dysfunction with normal libido.

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MATERIALS AND METHODS

Various types of AMS penile protshesis were implanted to 15 patients with erectile impotence between 1988 and 1990. The ages of patients varied between 23 and 66 years old. The avarege age was wrom 1 to 10 years. Urinalysis, CBC, SMA 12, testosteron, prolactine, FSH, LH, tyroid function tests studied. Stamp test was used for NPT (Nocturnal Penile Tumescence). We made papaverine test and measured PBI (Penile Brachial Index). In 5 of all patients, although by papaverine injection it seemed to be a vasculogenic problem, with PBI test we decided the arterial perfusion was adequte, so to check the veneous perfusion cavernosometry and cavernosography performed. The last 7 patients had also bulbocavernous reflex test and duplex ultrasonography as a result of our technical improvement. Table-1 showes the etiological factors of impotence detected in our study. Each patient was evaluated by a psychiatrist to find out either the patient would tolerate the implant not.

Table- 1. The etiology erectile impotence of the patients that we implanted penile prosthesis.

Etiology	Number of patients
Diabetes Mellitus	6
Arteriosclerosis	3
Post prostatectomy	1
Priapismus	1
Corporeal leak	1
Neurogenic	
a. Multiple sclerosis	1
b. Spinal chord trauma	1
Total	**15**

Of the implants, 10 were AMS Malleable 600 TM while 3 were AMS 700 CX and remaining 2 were AMS Hydroflex. Accordind to intellectual levels of the patients, detected by a psychiatrist, the type of the implant either malleable or inflatable prosthesis were chosen and with convenient cases the inflatable prosthesis were implanted. The postoperative follow up period was in intervals between 6 to 16 months.

The penile prothesis were implated with subcoronal incision for AMS Maleable, penoscrotal incision for AMS 700 CX and for its reservoir a Gibson incision were used and the reservoir were placed in the perivesical space and pump in the scrotum. After opening the tunica albuginea the corpus covernosum is dilated to the size for the implant measured, then the implants are placed in the corpus cavernosa.

RESULTS

The test done previous to the operations found to be as follows. Urine cultures and urinalysis showed no evidence of infection. CBC found to be normal. SMA 12 tests were normal except the serum glucose levels for diabetic patientes which were found elevated and treated before the operations. Coitus was allowed after postoperative sixth week. Postoperatively normal progressed patients were satisfied of the results except a patient who complained of decreased pleasure for the feeling of insensibility at the glans penis, possibly due to previous dorsal vein ligation he had and who was 55 years of age and was implanted a malleable penile prosthesis. During the follow up period patients had achieved coitus succesfully and had no pain with or without sexual intercourse. During a long period of follow up, one patient had a complaint of diffuculty in coitus due to decreased hardness of the malleable prosthesis, which was partially overcome with vaseline usage during coitus.

Malleable prosthesis coused a noticeble crest in front of the tousers which disturbed the patients. Inflatable prosthesis implanted patients didn't have such a complaint since the prosthesis colud be deflated during day time.

Postoperatively we had wound infections in 2 cases. The first case was 32 years old man with multible sclerosis who had implanted an AMS 700 CX inflatable prosthesis, with an open wound care and antibiotic treatment the infection healed and wound sutured secondarily and no recurrence happened lately. The second case was 58 years old, diabetic patient who was implanted a malleable penile prosthesis had infection at the wound site after his first coitus attempt. He picture of diabetic pre-coma was settled and after the suitable treatment the implant removed.

DISCUSSION

Ten percent of the adult population and one third of men over 60 years old are accepted to be impotent (4). Since it was suggested that impotence was mostly psychological in origine, the treatment was usually unsuccecful till the recent years. In the last decade, it was seen that more than 70% of males sexual dysfunction is organic, as a result of the improvements in diagnostic measures (1). In our clinic, we implanted penile prosthesis to the impotent men with organic etiology. First, dorsal vein ligation was applied to the patients who had veneous leak. If the results were not satisfactory, than we implanted penile prosthesis. One of the main criteria in implantation was to set the psychogenic situation of the patient which was performed by the psychiatry clinic.

AMS 600 Malleable penile prosthesis were implanted to over 50 years old patients under the view point of our country's economical situation. Since they are expensive, we implanted inflatable prosthesis (AMS 700 SX Hydroflex) to the young adults. Inflatable prosthesis were much comfortable since they were deflatable in day time. Malleable prosthesis gave discomfort to some extend by causing a crest in front of the trousers despite it could be bend down. This problem some what overcome by wearing loose trousers.

Except one who had mechanical failure of prosthesis, which was a malleable one, the others were succesful in their sexual life. This result was harmonious whit the international literature in which success rate was 91% (5). The patients also expressed that their partners were also satisfied of the results.

In 2 patients, we had seen infections. While we had to remove the implant in one, which was a malleable penis prosthesis, with the other patient a good wound care antibiotic treatment healed the wound

infection and saved the implant also, which was because the incision was infrapubic. With 2 infections our infection rate was 2.2%, which is correlating with the literature (5).

The conviction we had of this study is that penile prosthesis implantation is a good teatment method in well analysed and prepared impotent cases.

REFERENCES

1- **Padma-Nathan H, Goldstein I, Krane RJ.** Evaluation of the impotent patient. Sem in Urol 1986; 4: 225-32.

2- **Collins WE, Mc Kennedy JB, Silverman M, et al.** Multidiciplinary survey of erectile impotence. Can Med Assoc J 1983; 128, 1393-99.

3- **Earle CM, Watters GR, Tulloch AG, et al.** Complications associated with penile implants used to treat impotence. Aust V. Z. J Surg 1989; 59, 959-62.

4- **Lopiccolo J.** Diagnosis and treatment of male sexual dysfunction. J Sex Marital Ther 1986; 1, 215-218.

5- **Kabalin JN, Kessler R. Penile prosthesis surgery:** Review of ten-year experience and examination of reoperations. Urol 1989; 33, 17-19.