ORIGINAL RESEARCH

Penile Prosthesis First and Replacement Surgeries: Analysis of Patient and Partner Satisfaction

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ABSTRACT

Introduction. Among the many treatments for erectile dysfunction, implantation of a penile prosthesis has been associated with high patient satisfaction rates. Prosthesis replacement has become an accepted procedure in the event of device malfunction or complications, but to our knowledge, there are no data regarding the impact of implant replacement on patients and partner satisfaction.

Aim. The aim of our study was to assess and to compare the level of satisfaction, with a first or second penile prosthesis implantation (PPI), in men with refractory erectile dysfunction and their partners.

Methods. A survey study based on a five-item questionnaire was carried out at our center between January 1999 and January 2012.

Main outcome measures. The main outcome measure used was the level of patient and partner satisfaction with sexual intercourse after PPI.

Results. Of the 190 eligible patients, 149 (78%) completed the survey (110 underwent a first implant and 39 a reimplant). Seventy-nine percent of first-time implanted patients and 80% of the reimplanted patients ($P > 0.05$; not significant [ns]) reported satisfactory sexual intercourse (very or moderately satisfied), while 74% and 80% of their partners reported satisfactory intercourses, respectively ($P > 0.05$; ns). Overall, 73.7% of first implants and 70% of second implants reported that they would undergo the procedure again if the PPI failed ($P > 0.05$; ns). With regards to cosmetic aspects, 13% of the first implants' and 15% of second implants' partners reported either penile shortness or soft glans as the main causes of their dissatisfaction. Only 2.4% of first implants and 1% of reimplanted patients expressed difficulty in manipulating the device.

Conclusions. PPI is successful in returning the ability for satisfactory sexual intercourse to both first implant and reimplanted patients and their respective partners. **Lledó-García E, Jara-Rascón J, Moncada Iribarren I, Piñero-Sánchez J, Aragón-Chamizo J, and Hernández-Fernández C. Penile prosthesis first and replacement surgeries: Analysis of patient and partner satisfaction. J Sex Med 2015;12:1646–1653.**

Key Words. Erectile Dysfunction; Implantation; Penile Prosthesis; Satisfaction

Introduction

The European Association of Urology defined erectile dysfunction (ED) as the persistent inability to attain and maintain an erection sufficient to permit satisfactory sexual performance [1]. ED may substantially decrease the quality of life (QoL) for both patients and partners. The reported prevalence of ED among Spanish men is 19% [2]. The treatment of this disease is carried

out in stages [1] beginning with lifestyle changes and followed, or simultaneously, by medical treatment administration. Phosphodiesterase-5 (PDE5)-inhibitors are the most common oral treatments used. Also, intraurethral alprostadil, intracavernousal injections or combined therapy is usually reserved for those cases where outcome was inadequate.

In patients who do not respond to the medical management, penile prosthesis implantation (PPI) is a definitive option. Modern penile prostheses have been available since the early 1970s. Continuous refinements in the devices and surgical techniques for placement have made PPIs a highly safe and effective management strategy for refractory ED [3]. Having evolved from malleable and two-piece penile implants, the three-piece inflatable penile prostheses reflect the most modern implantable device [4]. The device consists of two silicone elastomer cylinders, a saline-filled reservoir, as well as a pump for inflation and deflation. The most commonly implanted multicomponent prostheses today are manufactured by two companies: American Medical Systems (AMS, Minneapolis, MN, USA) and Coloplast (Copenhagen, Denmark) and over the years, device manufacturers have modified their penile prostheses to improve device satisfaction and longevity rates [5,6].

Prosthesis replacement has become an accepted procedure in the event of device malfunction or complications with the first PPI, but to our knowledge there are no data regarding the impact of implant replacement on patients and partner satisfaction. This replacement surgery may involve greater technical complexity, and classically, there are a greater number of complications described such as infections [7,8]. The lack of specific and standardized PPI satisfaction questionnaires in Spanish especially intended for patients with penile prosthesis entails some problems at the time of evaluating patients and evidently, partner satisfaction.

Aims

The aim of this study was to assess and to compare the results of both procedures (first implant surgery [FIS] and replacement implant surgery [RIS]) in terms of sexual satisfaction during intercourse for patient and partner, difficulty using the prosthesis, patient acceptance of reimplantation in the event of device failure, and some cosmetic aspects of the technique.

Methods

We retrospectively reviewed medical records of 190 patients who underwent PPI at our center (Hospital General Universitario Gregorio Marañón, Madrid) between January 1999 and January 2012 (140 first implants, 50 reimplanted). Sociodemographic and clinical data collected included age, cause of ED, body mass index, cardiovascular risk factors (hypertension, dyslipidemia, diabetes, obesity, smoking), and anesthetic risk.

The indications for PPI were confirmation of severe organic ED along with a failure or an intolerance of drug treatment. Basic diagnostic work-up in patients with self-reported ED also includes medical and psychosexual history (Index of International Erectile Function, IIEF), focused physical examinations, and laboratory tests (glucose-lipid profile and total/free testosterone). Specific diagnostic tests (duplex ultrasound of the cavernous arteries, internal pudendal artriography) were indicated in very few conditions, in patients with primary erectile disorder (not caused by organic disease or psychogenic disorder), young patients with a history of pelvic or perineal trauma who could benefit from potentially curative vascular surgery, and patients with complex endocrine disorders.

The treatment scheme of ED in our patients includes initially identifying and treating curable causes, lifestyle changes and risk factor modification, and providing education and counseling to patients and partners. After identifying patient needs and expectations, medical treatment is offered (PDE5-inhibitors when not contraindicated tadalafil, vardenafil, sildenafil and dosage are evaluated after at least 3 months of attempts, or if secondary effects occur intracavernosal injections, MUSE, and/or vacuum device). When no effect from medical therapy is observed after 6–12 months of attempts, PPI is offered. Extensive and in-depth information is given to the patient and ideally to his partner regarding the procedure, postoperative penile length, and glans sensation after the implant in order to accommodate patient and partner expectations before the procedure. The preoperative information interviews were held separately and at least 2 weeks apart from the decision-making interviews to give the patient and his partner time to decide.

All patients were extensively informed regarding the procedure and its possible complications, and had signed an informed consent for surgery.