



ANDROLOGY/SEXUAL MEDICINE
ORIGINAL ARTICLE

Contemporary practice of testicular prosthesis insertion



Aza Mohammed ^{a,*}, Musaab Yassin ^b, David Hendry ^b, Gregory Walker ^c

^a The Royal Derby Hospital, Derby, UK

^b Gartnavel General Hospital, Glasgow, UK

^c The Royal Hospital for Sick Children, Glasgow, UK

Received 4 July 2015, Received in revised form 22 August 2015, Accepted 2 September 2015

Available online 13 October 2015

KEYWORDS

Testicular cancer;
Undescended testes;
Orchidectomy;
Testicular prosthesis

ABBREVIATIONS

OR, odds ratio;
SMR, Scottish Morbidity Records;
TPI, testicular prosthesis insertion

Abstract Objectives: To assess the practice of testicular prosthesis insertion (TPI) related to orchidectomy in one geographical region and to identify the difference in the rates of insertion among different age groups.

Patients and methods: Males who underwent orchidectomy between 1989 and 2009 were identified from data collected from Scottish Morbidity Records. Patients were classified into six age groups. The TPI rate and relation to original orchidectomy were analysed according to different age groups.

Results: In all, 3364 patients underwent orchidectomy in the 20-year period of the study. The most common indications for orchidectomy were atrophy, undescended testes, torsion, and tumour. In the same period, 530 patients had a TPI, with 59.4% of them (316 patients) having TPI at initial surgery, 17.3% (92) as a second surgical procedure, and 22.8% (122) having the TPI without prior history of orchidectomy. Among patients who underwent TPI, postpubertal males were more likely to have simultaneous insertion at the time of orchidectomy than prepubertal males (83% vs 32%; odds ratio 10.44, 95% confidence interval 5.23–20.82; $P < 0.01$).

Conclusion: Younger males are more likely to have TPI at a later date. Paediatric urologists should be mindful of the possibility of concurrent TPI at the time of initial scrotal/groin exploration.

© 2015 Arab Association of Urology. Production and hosting by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

* Corresponding author.

E-mail address: aza.mohammed16@gmail.com (A. Mohammed).

Peer review under responsibility of Arab Association of Urology.

Introduction

The presence of normal testes bilaterally plays an important role in the normal psychological development of young males and absence of a testis can have potential



Production and hosting by Elsevier

consequences as a result of loss of body image or masculinity [1,2]. Absence of an intrascrotal testis can be found in male patients at different ages, and this can be caused by agenesis, failure of normal testicular descent, or surgical removal. Orchidectomy is a common urological procedure and indications vary from benign conditions such as trauma or infection to testicular cancers.

In patients with absent testis, testicular prosthesis insertion (TPI) may be offered for cosmetic or psychological purposes. In appropriately sized patients, TPI can be done at the time of orchidectomy or as a subsequent elective procedure. Most patients report high levels of satisfaction after TPI [3,4]. In younger prepubertal boys, TPI at the time of surgery may not be appropriate due to difficulty in choosing the appropriate size of prosthesis and issues of informed consent.

In the present study, we aimed to identify the past and current indications for orchidectomy and the practice of TPI in one geographical region of the UK represented by the West of Scotland.

Patients and methods

This is a population-based retrospective study using a cohort of male patients who underwent orchidectomy in the City of Glasgow, Scotland over a 20-year period (1989–2009). This cohort was identified from the Scottish Morbidity Records (SMR) [5]. The SMR capture all episodes relating to inpatients and day-case patients discharged from non-psychiatric and non-obstetric wards in Scottish hospitals. Patients are provided with a unique identifying number that is used for clinical and research purposes.

From this cohort we identified males who underwent TPI using the SMR over the specified period using the unique identifying number. Data on the indications of orchidectomy and TPI were extracted from case notes review. This study has received approval from the Research Ethics Board and was conducted with accordance to the regulations of our local Audit Department.

The main outcomes for this study were the indications for orchidectomy in different age groups and the uptake of TPI in each of these groups.

Statistical analysis was performed using Statistical Package for the Social Sciences software SPSS Inc. (2007) Version 16.0. Chicago. We used the chi-squared test for the groups to determine the odds ratios (ORs).

Results

In all, 3364 patients were identified who had orchidectomy over the 20-year period. Those patients were subsequently divided into six age groups for statistical analysis as follows: 1, <13; 2, 13–15; 3, 16–20; 4, 21–30; 5, 31–40; and 6, >40 years.

This age thresholds have been used to distinguish between the paediatric age group, adolescents, and young adults. The distribution of orchidectomy across different age groups is shown in Table 1. The most frequent indications for orchidectomy are summarised in Table 2. The most common indications in pre- and peripubertal boys were atrophy, undescended testis and torsion, with malignancy becoming more common after the age of 16 years. Bilateral orchidectomy for hormonal manipulation in prostatic cancer was exclusive to the older age groups.

From this cohort we identified 530 patients who underwent TPI. The procedure was performed concurrently with orchidectomy in 316 patients (59.4%), while 92 (17.3%) had TPI performed at a later stage. In 122 patients (22.8%), TPI was undertaken without a previous record of orchidectomy. The rate of TPI and the timing related to orchidectomy were determined and are shown in Fig. 1.

Universally, the uptake of TPI was low and was performed (immediately or at a later stage) in only 15.76% of those patients undergoing orchidectomy. TPI particularly at the time of orchidectomy was more common in the older age groups (except the advanced age group). For patients who had TPI, those aged >16 years were more likely to have TPI at the same time as the original orchidectomy [302/364 (83%)] than patients aged <16 years [14/44 (32%)], OR 10.44 (95% CI 5.23–20.82; $P < 0.01$).

Discussion

The present study represents one of the largest orchidectomy and TPI cohorts in the literature. We considered all males undergoing orchidectomy in a single geographical region over a 20-year period and found a universally low rate of TPI, which is more marked in children and adolescents. Several surveys have considered the impact of loss of testis on the psychological wellbeing of affected males. Skoogh et al. [6] from the Swedish-Norwegian Testicular Cancer Group reported a significant proportion of men that underwent orchidectomy for non-seminomatous germ cell testicular cancer had feelings of loss and long-lasting shame, as well as loss

Table 1 The practice of orchidectomy across all age groups.

Age group, years	N (%)
< 13	289 (8.6)
13–15	108 (3.2)
16–20	210 (6.2)
21–30	569 (16.9)
31–40	555 (16.5)
> 40	1,633 (48.5)
All patients	3364 (100)

Download English Version:

<https://daneshyari.com/en/article/4267950>

Download Persian Version:

<https://daneshyari.com/article/4267950>

[Daneshyari.com](https://daneshyari.com)