

Cryptorchidism in Dalhatu Araf Specialist Hospital, Lafia, Nigeria: Presentation, Management, and Outcome

Abstract

Objective: To determine the presentation, management, and outcome of cryptorchidism in Dalhatu Araf Specialist Hospital, Lafia, Nigeria. **Materials and Methods:** This is a retrospective study conducted at Dalhatu Araf Specialist Hospital, Lafia, Nigeria. Information of patients who presented with cryptorchidism to the hospital from January 2015 to January 2020 was retrieved from the folders and analysed. **Results:** A total of 37 patients were studied during the study period. Only three (8.1%) presented and had correction before/at the age of two. A majority of patients (91.9%) presented after the age of two; 78% of the testes were palpable. The condition was unilateral in 30 patients (81.1%) and bilateral in seven patients (18.9%). Laparoscopy was used in one (2.7%) patient. A majority (51.4%) of the testes were in the inguinal canal, 29.7% at the external ring, 13.5% at the internal ring, and 5.4% within the abdomen. Orchidopexy was performed for 41 undescended testes and orchidectomy for three atrophic testes. There was a good outcome in 93.2% of the surgical corrections. Scrotal haematoma developed following two orchidopexies and one (2.2%) testis retracted. **Conclusion:** Cryptorchidism is a common anomaly in urology. The correction of cryptorchidism at the appropriate age is indicated to optimise testicular function, potentially reduce and/or facilitate the diagnosis of testicular malignancy, provide cosmetic benefits, and prevent complications such as a clinical hernia or torsion. Education of parents, traditional birth attendants, midwives, and doctors in our environment is required to ensure earlier presentation and treatment.

Keywords: Cryptorchidism, palpable, testis, undescended

Introduction

Cryptorchidism (undescended testis) is the absence of one or both testes in normal scrotal position and, during initial clinical evaluation, may refer to palpable or nonpalpable testes, which are either cryptorchid or absent.^[1] It is one of the most common congenital anomalies encountered in urology. It occurs in 1.0–4.6% of full-term and up to 1.1%–45.0% of preterm.^[2]

The testis can be arrested along its path of descent from the abdomen to scrotum during the course of development. Late presentation and delayed treatment of this condition can lead to infertility, higher risk of testicular trauma, testicular malignancy, testicular torsion, and strangulation of associated inguinal hernia. Thus, there is a need for early diagnosis and treatment at the appropriate time. Although it has been studied extensively, there is no report from our environment. Therefore, a study was conducted to evaluate the presentation,

management, and outcome of cryptorchidism in our environment.

Materials and Methods

This was a retrospective study conducted between January 2015 and January 2020 at the Department of Surgery, Dalhatu Araf Specialist Hospital, Lafia, Nigeria. Records of patients with undescended testes within the study periods were retrieved and analysed.

Statistical analysis was performed using statistical package for social sciences (version 22 SPSS Inc., Chicago, IL). A descriptive test statistic was used for the analysis.

Results

Thirty-seven patients were studied during the study period. The age range of the patients was between one and 60 years. Only three patients (8.1%) had corrective surgery before the age of two [see Table 1]. A majority (78%) of testes were palpable and 22% were not palpable. The condition was unilateral in 30 (81.1%) and bilateral in seven (18.9%).

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Table 1: Age at surgery

Age group (years)	Number	Percentage
<2	3	8.1
2–6	22	59.5
>6	12	32.4
Total	37	100.0

Table 2: Location of testis at surgery

Location of testis	Number	Percentage
External ring	11	29.7
Internal ring	5	13.5
Inguinal	19	51.4
Abdomen	2	5.4
Total	37	100.0

The number and percentage based on the location of testes were shown in Table 2. A majority of testes (51.4%) were within the inguinal canal. Orchidopexy was done for 41 undescended testes and orchidectomy for three (due to atrophy). The success rate was 97.3%, whereas 2.7% had ascending testis.

Two (5.3%) patients developed haematoma and one (2.7%) patient had ascending testis. One patient (2.7%) presented at the age of 40 years with bilateral undescended testis and primary infertility.

Discussion

Cryptorchidism is a common congenital anomaly in males. The time at presentation and intervention is a key to avoid the risk of subfertility and malignancy. Unfortunately, a majority of patients in developing countries present late. This study showed that only 8.1% had corrective surgery before of 2 years. The reasons for this abysmal low value include late presentation, ignorance, lack of recognition of the pathology by the attending primary care provider, and poverty. This finding is similar with reports from other regions of the country and developing countries. Ameh and Mbibu^[3] reported that only 11% of patients with cryptorchidism had surgery before 2 years. In the south-eastern part of Nigeria, Ekpemo and Onyearugha^[4] gave a value of 17% as those that had corrective surgery before 2 years. The European Association of Urology guideline recommended that for males with persistent undescended testis, orchidopexy should be done to bring the testis to the scrotum during the period of 6–18 months of age to ameliorate the risk of subfertility.^[5]

More than half (51.4%) of the undescended testes were located in the inguinal region in our study. There were similar reports of inguinal being the commonest location of undescended testis. Avakoudjo *et al.*^[6] found the testes in the inguinal region in 96.4% of cases, and Jeong *et al.*^[7] reported 85% of patients. However, this is contrary to the finding reported by Shitta *et al.*^[8] They observed that the commonest location of the testes at surgery was suprascrotal (64.4%) followed by canalicular

(34.2%). This may be attributed to the effect of anaesthesia as the muscles were relaxed.

The outcome of corrective surgery for cryptorchidism is usually good.^[9] In our study, most of the patients had good outcome after the surgery. Only two (5.3%) patients developed haematoma and one (2.7%) patient had ascending testis.

Training and retraining of primary care provider are required to improve on the age at surgery and to refer persistent case to a specialist early. Traditional birth attendants should also be taught the palpation of the scrotum at birth since many deliveries take place in the traditional home setting,

Conclusion

Cryptorchidism is a common urological condition. Unfortunately, a majority of our patients presented late. Orchidopexy at 6–18 months is recommended to optimise testicular parameters and allow for regular examination. The training of primary care providers to identify and refer undescended testis to specialist at the appropriate time is required to change the ugly scenario of late presentation.

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Conflicts of interest

There are no conflicts of interest.

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