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Case Report

Non-Descended Testicle Presenting as an Inguinal Hernia

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ARTICLE INFO

Article history: Received: 31 December, 2019 Accepted: 22 January, 2020 Published: 30 January, 2020 Keywords: Cryptorchidism non-descended testicle inguinal hernia TEP endoscopic inguinal hernia repair

Abbreviation: *TEP: totally extraperitoneal*

ABSTRACT

Background: An inguinal hernia is one of the most common surgical diagnosis worldwide and the most frequent anomaly of the groin area. Cryptorchidism, the failure of the testes to descend into the scrotum, is also a prevalent congenital abnormality, with a reported incidence of 1% to 2% at 12 months of age. However, it is rarely diagnosed in adult men.

Case Presentation: We present the case of a 63-year-old male who presented to the Emergency Department with severe left-sided groin pain since a couple of days. A bulge in the left groin was visibly obvious and was painful but reducible. An inguinal hernia was diagnosed, and since the patient had no previous (abdominal) surgery, he was scheduled for a totally extraperitoneal (TEP) endoscopic inguinal hernia repair. Per-operatively, an indirect inguinal hernia was initially seen; however, after further dissection and displacement of the peritoneal fold cranially, it became clear that the alleged hernia was the left testis situated in the preperitoneal space. The testis was surgically brought out through the inguinal canal. A preperitoneal mesh was placed.

Conclusion: In case of a painful and reducible inguinal swelling that occurs in a patient with an empty hemiscrotum, surgeons must consider the possibility of an undescended testis.

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Case Report

A 63-year-old male presented to the Emergency Department with severe left-sided groin pain since a couple of days. He had no significant medical history and did not use medication. A bulge in the left groin was visibly obvious and was painful but reducible. An inguinal hernia was diagnosed, and since the patient had no previous (abdominal) surgery, he was scheduled for a totally extraperitoneal (TEP) endoscopic inguinal hernia repair. The surgical procedure was carried out according to standard protocol and started uncomplicated with clear visibility and identification of the pubic bone, cavum retzii and epigastric vessels. Initially, an indirect inguinal hernia was seen; however, after further dissection and displacement of the peritoneal fold cranially, it became clear that the alleged hernia was the left testis situated in the preperitoneal space. Macroscopically, the testis had a normal configuration and consistency. Per-operatively, the scrotum was palpated, and only the right-sided testis was palpable and present in the scrotum. It was hypothesized that the testis became preperitoneal due to

traction. Therefore, an extra 5 mm trocar was inserted to bring the testis through the inguinal canal. The ductus deferens and testicular vessels were further dissected, and a 10 cm x 15 cm Prolene mesh was positioned in the preperitoneal space followed by desufflation under sight and removal of all trocars.

After the operation, the patient was confronted with the per-operative findings. He said that he had known his whole life that he had had only one (right-sided) testis, which was not mentioned by him during the intake nor recognized by the examining physician. A urologist was consulted to assess the risk of malignant degeneration of the moved/surgically descended testis, for which ultrasonography and laboratory measurements were advised. The ultrasound showed a small testis of 28.2 mm in the left groin with no signs of malignancy. Lactate dehydrogenase (219 U/L), human chorionic gonadotropin (<1 IU/L) and alpha-fetoprotein (7.3 μ g/L) were all within normal limits, so an orchidectomy was not regarded necessary and therefore a one-year follow-up with repetition of the same tests was advised.

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An inguinal hernia is one of the most common surgical diagnosis worldwide and the most frequent anomaly of the groin area [1]. In case of groin complaints, it is often one of the first things that come to mind during the patient interview. Cryptorchidism, the failure of the testes to descend into the scrotum, is also a prevalent congenital abnormality, with a reported incidence of 1% to 2% at 12 months of age [2]. However, it is rarely diagnosed in adult men. Although cryptorchidism and inguinal hernia are often associated due to a patency of the vaginal process, an undescended testis mimicking an inguinal hernia in an adult man is rather exceptional [3]. In case of a painful and reducible inguinal swelling that occurs in a patient with an empty hemiscrotum, surgeons must consider the possibility of an undescended testis [4].

Sources of Support

None.

Conflicts of Interest

None.

Ethical Approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent

Informed consent was obtained from all individual participants included in the study.

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