Simultaneous ipsilateral testicular seminoma with pelvic ectopy and hematovesicula seminalis

We present a rare case of 24 years old male who was diagnosed with simultaneous testicular tumor with pelvic ectopy and ipsilateral hematovesicula seminalis. Hemospermia was the only presented symptom. Patient underwent surgery and removal of the testicular tumor and right vesiculectomy were performed. Histopathological analysis revealed seminoma of the right testis and dilated right vesicula seminalis filled with hemorrhagic fluid and signs of chronic inflammation. Postoperatively irradiation of the abdomen was performed using standard protocol. Ten years after surgery there was no signs of disease recurrence.

Key words: seminoma testis, hemospermia, hematovesicula seminalis, testicular pelvic ectopy

INTRODUCTION

Cryptorchidism is present in approximately 6% of full-term neonates and approximately 0.8% of infants at 1 year of age. It can be bilateral in 10% of patients. Because of its association with other urinary tract abnormalities, cryptorchidism is thought to be one manifestation of a generalized defect in Genitourinary embryogenesis. Other associated malformations include renal agenesis or ectopies, ureteral duplications, seminal vesicle agenesis or cysts, and hypospadias. Cryptorchidism is also associated with infertility and is a well-recognized risk factor for testicular carcinoma. Approximately 90% of these tumors are seminomas, especially those that occur in the abdominally located testes. Although the overall incidence of cryptorchidism is low (1%), a history of an undescended testis is present in 3.5%-14.5% of patients with testicular tumors. The pathophysiology of malignant transformation in these testes is not completely understood.

One hypothesis is that cryptorchidism is not merely incomplete descent of the testis, but that it reflects a generalized defect in embryogenesis and results in bilateral dysgenetic gonads descended. Thus, the increased risk of carcinoma cannot be attributed to local environmental factors, such as increased temperature in the abdomen versus the scrotum. While it is true that the risk of carcinoma increases with the degree of ectopy (intraabdominal testes are at greater risk than those in the inguinal canal), this also supports the theory if it is assumed that the greatest degree of ectopy reflects the greatest perturbation of embryogenesis.

The defective embryogenesis hypothesis is further supported by the observation that orchiopexy, even at an early age, does not appreciably decrease the risk of developing a tumor. Hemospermia is a common benign condition, but its prevalence remains unknown and can result from several causes. The etiology is idiopathic in about 30-70% of the cases. The hemospermia is first of inflammatory origin, in the young patients, where it is due to uretroprostatitis or orchi-epididymitis, but in the older, it is due to a benign of malignant prostatic tumors. There are no known published case reports linking hemospermia and testicular tumor with pelvic ectopy.

CASE REPORT

We present a rare case of 24 year old male who was diagnosed with simultaneous testicular tumor with pelvic ectopy and ipsilateral hematovesicula seminalis. Hemospermia was the only presented symptom. Physical examination revealed that left testis and epididymis were without pathophysiological deformities, whoever right hemiscrotum was empty. Standard laboratory blood tests were normal.
Echography of the abdominal cavity revealed dilated right seminal vesicle, 6.5x4 cm in diameter with thickening of the walls. IVP was performed and revealed that there were no abnormalities with kidneys, ureters and bladder. It was decided that right vesiculectomy will be performed. Transperitoneal midline infraumbilical incision was performed which revealed movable abdominal 10 cm in size yellow tumor formation.

Complete resection of the tumor formation was performed with the enucleation of the dilated right seminal vesicle. The tumor was easily resected. Its vascular pedicle was thick and hypertrophied. Macroscopically vesicular seminalis was filled with hemorrhagic fluid.

Histopathological analysis diagnosed the abdominal tumor formation as seminoma of the testis and chronic inflammation of the enucleated seminal vesicle. Postoperatively testicular tumor markers were analyzed and were in normal range.

Three months after surgery irradiation was performed of the abdomen using standard protocol of the time. Ten years after the surgical treatment there were no signs of the disease recurrence.

**CONCLUSION**

The maldevelopment of the right mesonephric duct could be the common cause of the left testicle.

Pelvic ectopia and the maldevelopment and obstruction of the left ejaculatory duct. In addition, obstructed ejaculatory duct could be the cause of the left seminal vesicle cystic degeneration, and subsequent rupture of small blood vessels in the seminal vesicle wall.

**SUMMARY**

Prikazujemo redak slučaj muškarca starog 24 godine kod koga je dijagnostikovan tumor desnog testisa u karličnoj ektopiji i hematovezikula seminalis sa iste strane.

Ključne reči: seminom testis, hemospermija, hematovezikula seminalis, karlična ektopija testisa

**BIBLIOGRAFIJA**


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