10. METASTATIC MATURE TERATOMA ASSOCIATION WITH AZOOSPERMIA DUE TO BILATERAL CRYPTORCHIDISM AND TESTICULAR BENIGN TERATOMA: CASE REPORT

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Introduction. Azoospermia, the most severe type of male infertility, is caused by numerous untreatable testicular problems. Approximately 10% to 15% of all male infertile individuals suffer from azoospermia, which affects approximately 1% of all men. The phenomenon known as growing teratoma syndrome is considered to be relatively uncommon. It is characterized by the enlargement of a residual mass that has been histologically confirmed to be a mature teratoma.

Case statement. We present the case of a 37-year-old male with difficulty conceiving. The patient has a history of bilateral cryptorchidism, for which orchidopexy was performed at the age of 6. 4 years ago, the patient presented a testicular mass. Scrotal ultrasonography (sUSG) revealed an asymmetric enlargement of the right testicle with multiple microcalcifications and peripheral vascularity, measuring 3.2x3.0x2.2 cm, indicative of primary testicular cancer, with normal serum tumor markers. Semen evaluation revealed azoospermia. Subsequent chest and abdomen contrast enhanced CT (CECT) scans showed an unremarkable chest scan, while the abdomen CECT identified a thin-walled, well-circumscribed, cystic mass compressing the anterior aspect of the inferior vena cava, measuring up to 7 cm in diameter. Right orchiectomy was performed. The surgical pathology report (SPR) reveals benign teratomatous elements within the testis, a central cystic component containing necrotic material, that occupies ~75% of testicular volume. The remaining seminiferous tubules show absent spermatogenesis and Leydig cell hyperplasia. Afterwards, resection of the retroperitoneal mass was performed. The SPR confirms the diagnosis of a mature teratoma with metastasis to a precaval lymph node. Notably, paracaval, intra-aorto-caval, and para-aortic lymph nodes show no signs of metastasis. The patient maintained regular screening, undergoing abdomen and pelvis CECT scans biannually. The present patient examination involved the assessment of hormones, spermogram and sUSG. The relevant abnormal hormonal results: Tt-191, FSH-65, LH-25, Prolactin-732. The spermogram evidences azoospermia. sUSG reveals left testicle volume 3.4 cm3, irregular contour, inhomogeneous “geographic” echo structure. Doppler USG reveals increased vascularity. Micro-TESE was performed on left testis with negative sperm retrieval results, histology – tubular fibrosis and Sertoli cell-only syndrome.

Discussions. Metastatic mature teratoma is frequently observed in both radiological and histopathological examinations following chemotherapy for metastatic non-seminomatous germ cell cancers. The primary explanation for these remaining tumors is the distinct resistance of teratomas to chemotherapy compared to the heightened sensitivity of the embryonal components. Resection of metastatic mature teratomas is recommended due to their malignant potential and occasional progression to growing teratoma syndrome, which involves the invasion of surrounding structures.

Conclusion. Azoospermia due bilateral cryptorchidism is a common clinical situation. However, there’s no evidence of concomitant metastatic mature teratoma and testicular benign teratoma related to this condition.