



## PURE TESTICULAR YOLK SAC TUMOR IN ADULT- CASE REPORT

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**ABSTRACT** **Introduction:** Yolk sac tumor of testis is a common germ cell tumor in infants and children. Pure gonadal yolk sac tumor is exceedingly uncommon.

**Case Report:** 23 years old male presented with left sided scrotal swelling since 3 months. AFP was significantly raised and CEMRI found it to be a malignant neoplastic lesion. Histopathological features of the orchidectomy specimen sent to the Department of Pathology, Gauhati Medical College, Guwahati showed features of Microcystic Reticular pattern of Yolk sac tumor of left testis and strong and diffuse cytoplasmic and membranous positivity for AFP by Immunohistochemistry.

**Discussion:** Microcystic Reticular pattern is the most common histomorphological pattern of Yolk sac tumor. Serum AFP is elevated in most of the cases. AFP is also a specific Immunohistochemical marker.

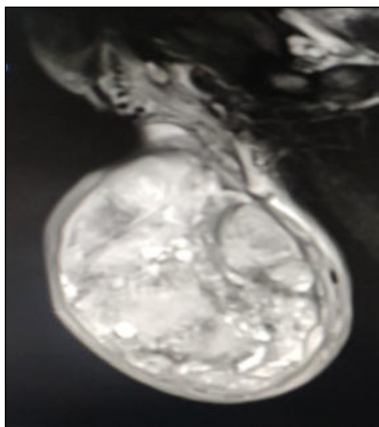
**Conclusion:** Yolk sac tumor often presents with other germ cell component in adults. In adults, in its pure form is exceptionally rare. Prognosis of the pure yolk sac tumor in adults is worse than in infants and children.

**KEYWORDS :****INTRODUCTION:**

Yolk sac tumor of testes is a germ cell tumour composed of cells or structures reminiscent of embryonic or fetal yolk sac, allantois and extraembryonic mesenchyme. It is a common Germ Cell Tumor in infants and children in its pure form. However, in adults it is often associated with other germ cell component [1]. So, whenever Germ Cell Tumor of testes is encountered in adults, it is usually found as Mixed Germ Cell Tumor. Pure gonadal Germ Cell Tumor in adults is extremely rare [2,3].

**CASE REPORT:**

We present a case of 23years old male with left sided scrotal swelling. The patient presents with left sided scrotal swelling with mild pain since 3 months. Among biochemical investigations, AFP (Alpha fetoprotein) was found to be significantly high (20800 IU/ml). CEMRI scrotum revealed well defined heterogeneously enhancing mass lesion involving the left testis with internal areas of necrosis, hemorrhage, showing diffusion restriction and other imaging features, suggestive of malignant neoplastic etiology. Left sided high inguinal orchidectomy was performed and the specimen was sent to the Histopathology section of the Department of Pathology, Gauhati Medical College, Guwahati.

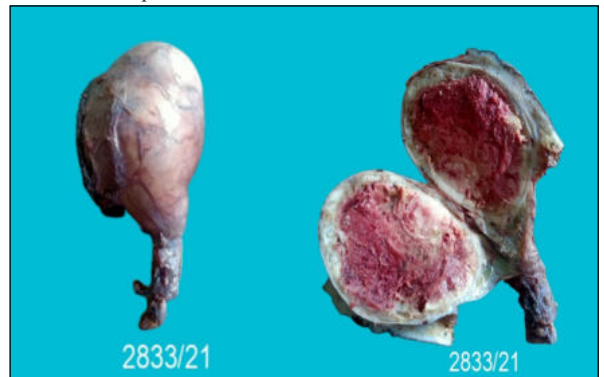


**Fig:** CEMRI view of yolk sac tumor

**HISTOPATHOLOGICAL EXAMINATION:**

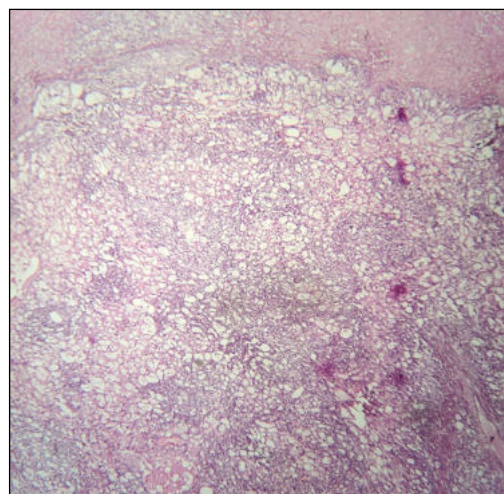
**Gross-** Received a left-sided orchidectomy specimen measuring (15 x 8.5 x 7) cm<sup>3</sup> with attached skin measuring (8.5 x 6) cm<sup>3</sup>. The outer surface is smooth. On cut section, a tumor is noted measuring (10 x 7 x

5) cm<sup>3</sup> and is encapsulated. The tumor shows extensive areas of hemorrhage. Attached spermatic cord measures 6.5 cm in length and the distance of spermatic cord from the tumor is 7.5 cm.

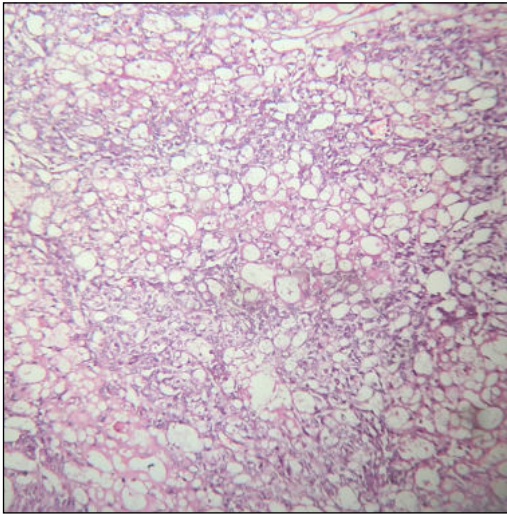


**Fig:** Gross Picture Of The Orchidectomy Specimen, Cut Section Shows The Tumor

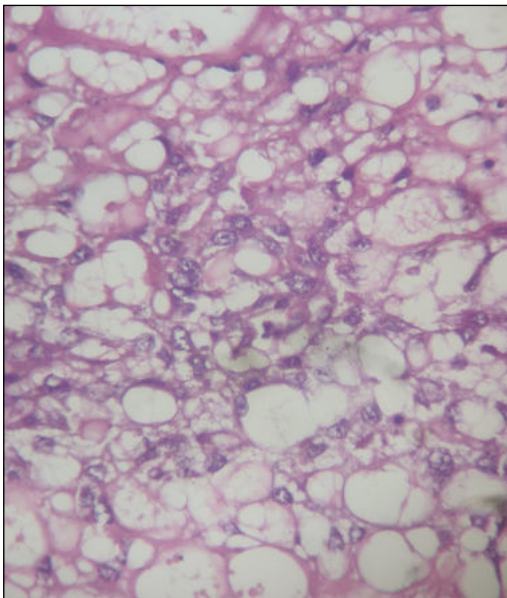
**Microscopy-** Multiple sections show features of Microcystic Reticular pattern of Yolk Sac Tumour of left testis.



**Fig:** Scanner (4X) view of Microcystic pattern of Yolk Sac Tumor

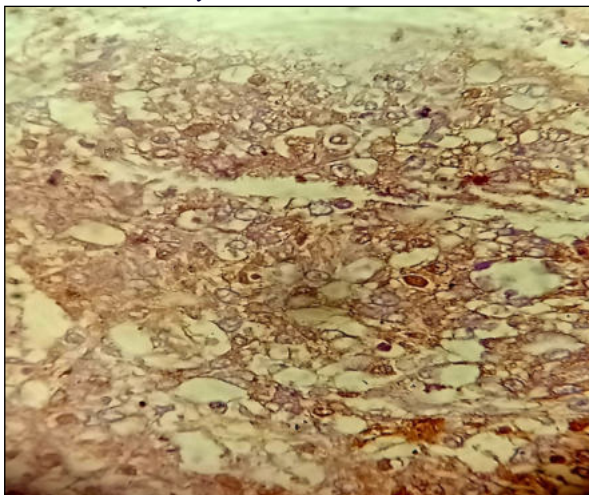


**Fig:** Low Power (10X) View Of Microcystic Pattern Yolk Sac Tumor



**Fig:** High Power (40X) view of Microcystic pattern of Yolk Sac Tumor

**Immunohistochemistry:**



**Fig:** Strong And Diffuse Cytoplasmic And Membranous Positivity For AFP

sac tumor of the testis [4]. In our case also, we found a significantly high value of Alpha-feto protein (20800 IU/ml). Microcystic Reticular Pattern is the most common histomorphological pattern of yolk sac tumor [5]. Our finding is also in accordance with the same. Alpha feto protein is specific Immunohistochemical marker for the disease [6]. We found strong diffuse membranous positivity for AFP.

**CONCLUSION:**

Yolk sac tumor commonly occurs in infants and young children. However, uncommonly can occur in postpubertal adults usually in the form of Mixed Germ Cell Tumor. Adult Yolk Sac Tumor in its pure form is extremely rare. Metastasis in adult yolk sac tumor occurs via lymphatics only whereas infantile yolk sac tumor can spread via haematogenous as well as lymphatic route. Prognosis of pure adult yolk sac tumor is worse than its infantile version.

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**DISCUSSION:**

Serum Alpha-feto protein (AFP) is elevated in most of the cases of yolk