PURE YOLK CELL TESTICULAR TUMOR;
A 23 YEAR OLD MALE PATIENT, A RARE ENTITY

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ABSTRACT… Background: Testicular tumor primarily originate from germ cells and are found in all age groups. Among germ cell tumors one is pure yolk cell tumor which is tumor of infant and pediatric age group and is extremely rare in adulthood. Case Presentation: Current titled case report is about a 23 year old male who presented with painless enlargement of right testis. Examination revealed as hard lump involving right testis and clinically epididymis spared. Hormonal assessment consistent with malignant lesion of testis. Right inguinal approached orchidectomy done and histopathology revealed it as pure yolk sac tumor of testis. Conclusion: Pure yolk cell tumor in adulthood is a very rare tumor and once diagnosed, need follow up in post-operative circumstances.

Key words: Testicular Tumor, Germ cell Tumor, Pure Yolk Cell Tumor.

INTRODUCTION
Germ cells are the prime cells of the testis, so most of testicular tumors are germ cell tumors. WHO classification announced for testicular tumor is same as that being initially coined in 1990’s (Table-I). Pure Yolk sac tumor is primarily found in infant and childhood age group and accounts for 65 % of testicular tumor in this age group however is a very rare entity in pure form in adulthood accounting just 2.4 % of adult age group patients presenting with testicular lesion. On gross evaluation of lesion, this tumor is usually soft on touch, homogenous in consistency, grayish-yellow in color, and not encapsulated. Histological analysis is characterized by characteristic Schiller–Duval bodies and reticular and microcystic patterns. Schiller–Duval bodies typically consist of a central blood vessel surrounded by epithelial-like cells, space, and more epithelial-like cells. Clinically majority of patients present with painless testicular lump. Workup include radiological investigations including ultrasound scrotum, CT scan abdomen for metastatic analysis and most important immunohistochemical analysis with alpha fetoprotein (AFP), PLAP, cytokeratins, AAT, albumin and ferritin. Among these, AFP expression is seen in 92 % of cases. As far as prognosis is concerned, adult yolk sac tumor is poor as compared to infantile group yolk cell tumor.

Germ Cell Tumors
Intratubular germ cell neoplasia. unclassified Other types
Tumors of One Histologic Type (Pure Forms)
Seminoma
Synctiotrophoblastic cells Spermatocytic seminoma
Embryonal carcinoma
Yolk sac tumor
Trophoblastic tumors
Choriocarcinoma
Trophoblastic neoplasms other than choriocarcinoma
Monophasic choriocarcinoma
Placental site trophoblastic tumor
Teratoma
Demoted cyst
Monodermal teratoma
Teratoma with somatic type malignandes

Tumors of More Than One Histologic Type (Mixed Forms)
Mixed embryonal carcinoma and teratoma
Mixed teratoma and seminoma
Choriocarcinoma and teratoma/embryonal carcinoma
Others

Table-I. Histological classification of testicular tumor
CASE PRESENTATION
This 23 years old male presented with painless right testicular swelling for last 6 months. Initially it was small in size and gradually progressed associated with sense of scrotal heaviness. There was no other associated symptom associated with this complaint. On examination firm to hard lump about 4 x 3cm in size associated with right testis, right testis not separable from lesion and epididymis found spared of lesion. Scrotal skin mobile over testis, left testis examination insignificant and clinically no abdominal lymphadenopathy appreciated. Ultrasound revealed right testicular mass with mixed echogenicity. CT scan abdomen insignificant for any metastatic workup. Hormonal analysis showing alfa-feto proteins 1866ng/ml, beta hCG level at 230 mIU/ml and LDH 130 IU/L. Patient operated and undergone right inguinally approached orchidectomy. Specimen sent for histopathology and revealed pure yolk sac tumor of testis.

CONCLUSION
Pure yolk sac tumor is a rare entity in adult patients and when diagnosed, should undergo close follow up as associated with poor prognosis in said age group.

REFERENCES

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