The Professional Medical Journal
www.theprofesional.com

DOI: 10.17957/TPMJ/17.3917

CASE REPORT PROF-3917

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

1. Post Graduate Trainee, Department of Urology and Kidney Transplantation, Allied Hospital, Faisalabad.
2. Assistant Professor, Department of Urology and Kidney Transplantation, Allied Hospital, Faisalabad.
3. Post Graduate Trainee, Department of Urology and Kidney Transplantation, Allied Hospital, Faisalabad.

Correspondence Address:
Muhammad Sheraz Javed
Post Graduate Trainee,
Department of Urology and Kidney Transplantation,
Allied Hospital, Faisalabad.

Article received on:
04/01/2017
Accepted for publication:
14/03/2017
Received after proof reading:
06/04/2017

Muhammad Sheraz Javed[1], Muhammad Irfan Munir[2], Muhammad Saad Siddique[3]

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.

Article Citation: Javed MS, Munir MI, Siddique MS. Pure yolk cell testicular tumor; A 23 year old male patient, a rare entity. Professional Med J 2017;24(4):637-638.
DOI: 10.17957/TPMJ/17.3917

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[1] is same as that being initially coined in 1990's[2] (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[3] however is a very rare entity in pure form[4] in adulthood accounting just 2.4 %[3] 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.[5] Schiller–Duval bodies typically consist of a central blood vessel surrounded by epithelial-like cells, space, and more epithelial-like cells.[6] 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.[7] As far as prognosis is concerned, adult yolk sac tumor is poor as compared to infantile group yolk cell tumor.[8]

Germ Cell Tumors
Intratubular germ cell neoplasia. unclassified Other types
Tumors of One Histologic Type (Pure Forms)
Seminoina
Seminoma with syncytiotrophoblastic cells Spermatocytic seminoma
Embryonal cardnoma
Yolk sac tumor
Trophoblastic tumors
Choriocardnoma
Trophoblastic neoplasms other than choriocardnoma
Monophasic choriocardnoma
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 cardnoma and teratoma
Mixed teratoma and seminoma
Choriocardnoma and teratoma/embryonal cardnoma
Others

Table-I. Histological classification of testicular tumor

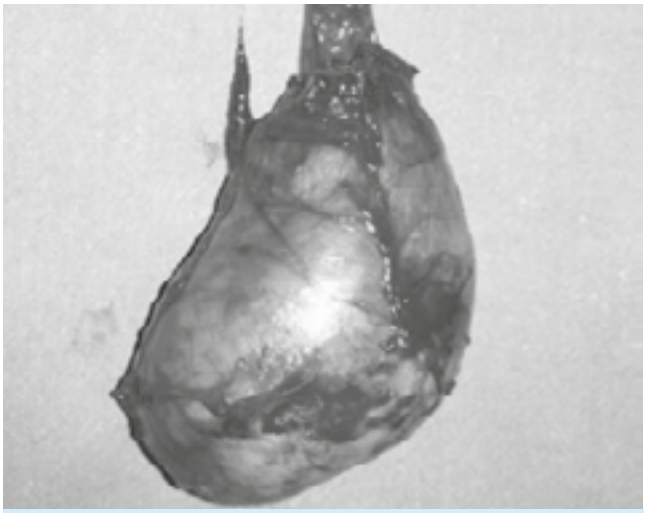

Figure-1. Post-orchiectomy gross specimen

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

1. Eble JN, Sauter G, Epstein JI, Sesterhenn I. **WHO Classification of Tumours. Pathology and Genetics. Tumours of the Urinary System and Male Genital Organs.** Lyon, France: IARC Press; 2004.
2. Mostofi FK, Sesterhenn IA. **Histological Typing of Testis Tumors. 2nd ed. World Health Organization.** Springer-Verlag: Berlin Heidelberg; 1998.
3. Kaplan GW, Cromie WC, Kelalis PP, et al. **Prepubertal yolk sac testicular tumors: report of the testicular tumor registry.** J Urol. 1988; 140:1109-1112.
4. Talerman A. **The incidence of yolk sac tumor (endodermal sinus tumor) elements in germ cell tumors of the testis in adults.** Cancer 1975; 36:211-5.
5. Mills S. **Sternberg's Textbook of Surgical pathology.** 5th ed. Philadelphia: Wolters Kluwer; 2015. p. 1980-5.
6. Teilum G. **Endodermal sinus tumors of the ovary and testis: comparative morphogenesis of the so-called mesonephroma ovarii (schiller) and extraembryonic (yolk sac-allantoic) structures of the rat placenta.** Cancer. 1959; 12:1092-1105.
7. Jacobsen GK, Jacobsen M. **Alpha-fetoprotein (AFP) and human chorionic gonadotropin (HCG) in testicular germ cell tumours: a prospective immunohistochemical study.** Acta Pathol Microbiol Immunol Scand [A]. 1983; 91:165-176.
8. Young RH. **The yolk sac tumor: Reflections on a remarkable neoplasm and two of the many intrigued by it-Gunnar Teilum and Aleksander Talerman-and the bond it formed between them.** Int J Surg Pathol 2014; 22:677-87.

AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author-s Full Name	Contribution to the paper	Author=s Signature
1	Muhammad Sheraz Javed	Principal Author	
2	Muhammad Irfan Munir	Co-author	
3	Muhammad Saad Siddique	Co-author	