IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 21, Issue 6 Ser.2 (June. 2022), PP 46-48
www.iosrjournals.org

"A rare case of serous papillary adenocarcinoma of testis- ovarian type in a young adolescent male"

Dr. Peta Ravindra Kumar[1], Dr. Harsha P Panchal[2], Dr. Apurva Patel[3], Dr. Sonia Parikh[3],
Dr. Duncan Khanikar[1], Dr. Nikhil Himthani[1]
1 -Resident, 2-Professor and Head of Department, 3- Professor,
Department of Medical Oncology, The Gujarat Cancer Research Institute, Ahmedabad, Gujarat, India.

Abstract
Epithelial tumors are the most common group of ovarian tumors found in women. Ovarian type papillary serous adenocarcinoma of testis are very rare tumors found in men ranging from benign to malignant potential. There is no consensus regarding the histopathological diagnosis, clinical behavior, chemotherapy response and prognosis due to rarity of these neoplasms. Here we present a rare case of serous papillary adenocarcinoma of testis- ovarian type in a young male.

Keywords: *serous papillary adenocarcinoma, testis, ovarian type*

Date of Submission: 29-05-2022 Date of Acceptance: 10-06-2022

I. Introduction

Serous papillary cystadenocarcinoma of testis (ovarian type) is a rare neoplasm showing morphologic resemblance to surface epithelial tumors of ovary[1]. The tumor biology ranges from less aggressive benign to extremely rare invasive malignant tumors with metastatic potential[2]. Most of these tumors are noninvasive and benign.

II. Case Report

A 18 year adolescent male presented with right scrotal swelling of 4 weeks duration. Physical examination revealed firm swelling in right scrotum and inguinal region. Patient presented 3 years back at an outside hospital with right scrotal swelling and tumor markers were normal. He was operated with right high inguinal orchidectomy. Post-operative histopathological examination was suggestive of serous papillary cystadenocarcinoma of right testis. Patient then lost to follow up for 1 year

He then presented to another hospital in Jodhpur in 2017 with right scrotal and inguinal swelling. CECT of thorax, abdomen and pelvis suggested right scrotal lesion of 3.5x2.1x2.8cm with enlarged locoregional lymph nodes. There was another lymph node in lower anterior abdominal wall measuring 3.8x1.5cm. Biopsy and immunohistochemistry of right scrotal mass showed CK7, Pan Cytokeratin, Vimentin, ER, PR, CA125, CK5/6(focal), WT1, CD10(focal) to be positive and CK20, CEA, TTF 1, Inhibin, Synaptophysin, Calretinin, Placental ALP were negative. Proliferation index Ki67% was 2-5%. Overall diagnosis was suggestive of ovarian type of epithelial tumor- papillary serous carcinoma of right testis. Patient was advised chemotherapy (Paclitaxel and Carboplatin) but he lost to follow up and then took ayurvedic treatment for 1 year.

Patient presented in July 2019 to our institute with right scrotal swelling. CECT of thorax, abdomen and pelvis showed 2.5x3.5cm soft tissue lesion in right testicular region which was suggestive of recurrent lesion. Another soft tissue density lesion involving right iliac fossa region 3.7x2.8cm infiltrating rectus muscle was present. Multiple nodes in para aortic region, largest 10x8mm were present. Biopsy and immunohistochemistry of right iliac fossa lesion showed CK7,WT1, PAX8, ER, Mesothelin to be positive and CK5/6, OCT 3/4 were negative, suggestive of recurrent papillary serous adenocarcinoma (ovarian type) of right testis. Tumor markers were found to be normal. Patient was given 3 cycles of paclitaxel and carboplatin. CECT scan showed stable disease and patient had good subjective response. Patient was ongoing treatment with 3 more cycles of paclitaxel and carboplatin.

III. Discussion

Mullerian epithelial tumors of testis are extremely rare and the most common is the serous type[4]. The first case series was reported in 1986 by Young and Scully[1]. These tumors have a strong morphologic resemblance to the surface epithelial tumors of the ovary. These serous papillary tumors may be borderline,

benign or invasive (malignant) as their ovarian counterparts and have similar morphologic, immunohistochemical and ultrastructural features as that of serous tumors that are arising from the female genital tract[5]. These tumors develop from mesothelial inclusions or abnormalities in the development of coelomic epithelium during embryogenesis[3] i.e. from areas of coelomic epithelium that has been trapped in the testicular tissue[5]. The clinical presentation in the previously reported cases have been testicular fullness or mass[5]. A high degree of suspicion and awareness about this entity is essential for diagnosis.

An important differential diagnosis of this serous carcinoma with papillary features is metastatic deposits from sites like lung, mesothelioma, prostate, bladder and GIT[3]. IHC[6] panel, tumor markers along with radiological support helps in diagnosing this rare entity. As serous papillary cystadenocarcinoma of testis is a rare tumor there is no consensus regarding specific guidelines to treatment. Review of literature suggests using treatment protocols of ovarian counterparts as a reasonable approach[7]. Long term follow up is required as these tumors have a variable course[6].

IV. Conclusion

In summary, serous papillary cystadenocarcinoma of the testis- ovarian type is rarely observed. Caution is required while diagnosing and treating these rare tumors. Further experience is required in formulating better management options for patients with serous papillary cystadenocarcinoma of testis.

V. References

[1]. Young RH, Scully RE. Testicular and para testicular tumors and tumor‐like lesions of ovarian common epithelial and Mullerian types. A report of four cases and review of the literature. Am J Clin Pathol 1986;86: 146‐52.
[2]. Ulbright TM, Young RH. Primary mucinous tumors of the testis and Para testis: A report of nine cases. Am J Surg Pathol 2003;27: 1221‐8.
[3]. Amin MB. Selected other problematic testicular and para testicular lesions: rete testis neoplasms and pseudotumor, mesothelial lesions and secondary tumors. Mod Pathol 2005;18: S131-45.
[4]. Jones MA, Young RH, Srigley JR, Scully RE. para testicular serous papillary carcinoma, A report of six cases. Am J Surg Pathol 1995;12: 1359-65.
[5]. Sumrall A, Puncky L, Brown A, Thigpen T. Ovarian cancer in a man? Clin Ovarian Cancer 2009; 2:57-9.
[6]. Dupre F, Zachar D, Choquenet C. A propos of one case of para testicular papillary serous cystadenocarcinoma. Ann Pathol. 2001; 21:63–66.
[7]. Yeh CH, Hsieh PP, Lin SJ, Hong YC, Tsai TH, Hsueh-Lin Yu L, et al. Testicular serous carcinoma of ovarian epithelial type: A case report and review of the literature. Journal of Cancer Research and Practice. 2016;4(2):76-79.

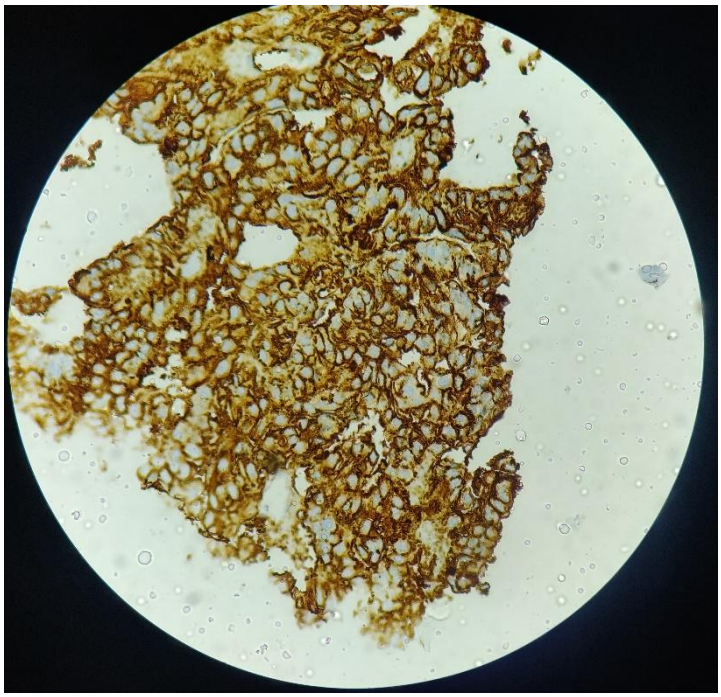

Figure 1: ck7 staining (Cytoplasmic Positivity)

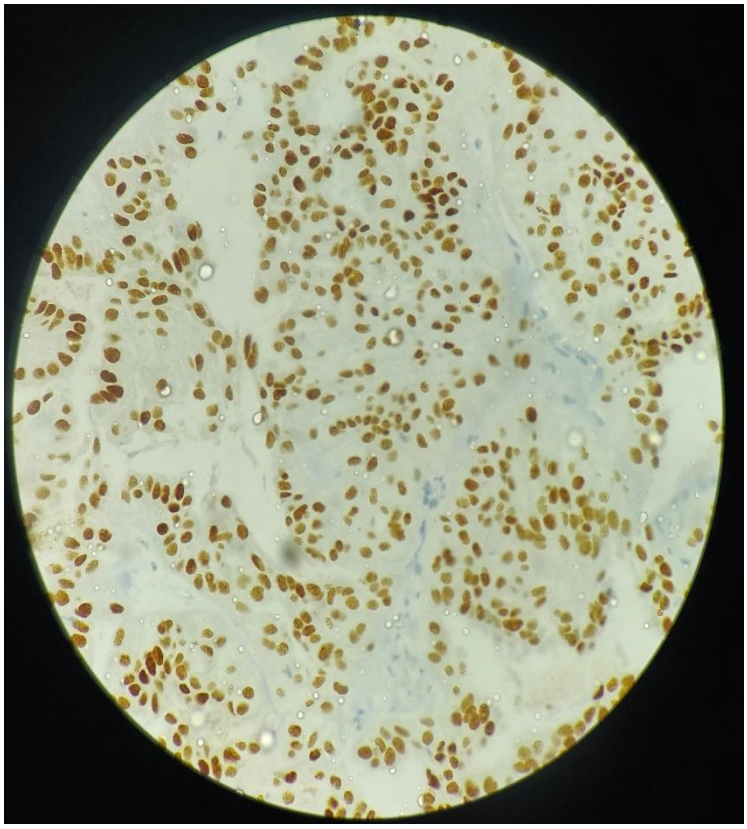

Figure 2: Pax 8 staining (Nuclear positivity).

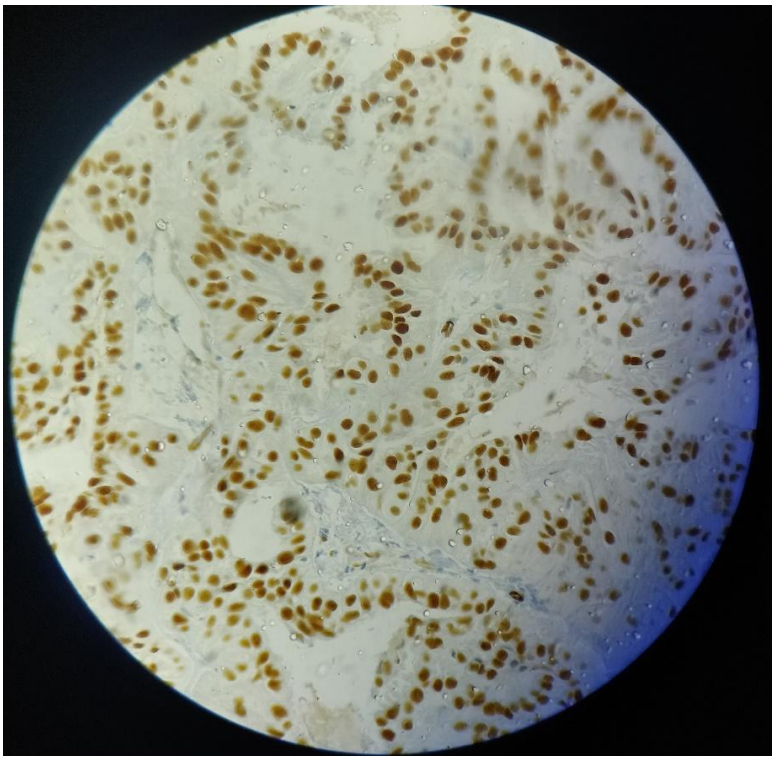

Figure 3: WT 1 staining (Nuclear positivity).

Dr. Peta Ravindra Kumar, et. al. "A rare case of serous papillary adenocarcinoma of testis-ovarian type in a young adolescent male". *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 21(06), 2022, pp. 46-48.