e - ISSN - 2349 - 8005

INTERNATIONAL JOURNAL OF ADVANCES IN CASE REPORTS

Journal homepage: www.mcmed.us/journal/ijacr

HIGH GRADE SEROUS CARCINOMA OF FALLOPIAN TUBE – AN INCIDENTAL FINDING

Vijayabasker Mithun KR*, Jayanthi chandran, Ulagammal, Sankareshwari , Arun Kumar SP

Department of Pathology , Sri Venkateshwaraa Medical College Hospital and Research Centre, Ariyur, Pondicherry, India.

Corresponding Author:- **Vijayabasker Mithun KR**
E-mail: mithun2mbbs@gmail.com

Article Info
Received 27/02/2016
Revised 16/03/2016
Accepted 25/03/2016

Key words:
Carcinoma, Genital malignancies, Vaginum.

ABSTRACT

High grade serous carcinoma is a very rare tumour of fallopian tube. We report a case of incidental high grade serous carcinoma of fallopian tube in total abdominal hysterectomy.

INTRODUCTION

Primary fallopian tube carcinoma (PFTC) is a rare tumor that accounts for approximately 0.14 to 1.8% of all female genital malignancies [1]. Overall incidence recorded in one study was 0.41 per 100,000 women [2].

CASE REPORT

A 58-year-old lady presented with lower abdominal pain which was insidious, progressive, pricking type, radiating to back and serous discharge per vaginum for 1 year. No other significant clinical history was present. Ultrasound abdomen showed bilateral tubo-ovarian complex cyst for which TAH with BSO was done and the specimen was sent for histopathological examination.

Grossly, hysterectomy specimen showed normal uterus cervix with left adenexa and right fallopian tube was distended (retorted shaped). On cut section, inner surface of the right fallopian tube showed multiple small papillary projections.

Microscopically, the tumor showed broad papillae with epithelial stratification and irregular slit like spaces with micropapillary tufting infiltrating the lamina propria.[fig.1a]. The nuclei were enlarged, hyperchromatic and pleomorphic [fig. 2] Tumor was infiltrating the lamina propria and muscularis without penetrating serosal surface [fig. 1b]. Histopathological diagnosis of high grade serous carcinoma stage IA was made and the patient was referred to higher centre for further management.

DISCUSSION

Primary fallopian tube carcinoma (PFTC) is a rare tumor that accounts for approximately 0.14 to 1.8% of all female genital malignancies[1]. There are no known predisposing factors, but it has been found to be associated with nulliparity, infertility and pelvic inflammatory disease .[1]. The Latzko's[3] classic syndrome of crampy lower abdominal pain, mass followed by profuse watery discharge was been found only in 15% of the patients with PFTC, while the most common complaint was abnormal vaginal bleeding.[4]. In our case patient presented with abdominal pain and serous vaginal discharge. Ultrasound shows fallopian tube carcinoma as sausage-shaped mass or a multilobular mass with a cog-and-wheel appearance [5] but our case showed bilateral tubo-ovarian complex cyst.Unlike ovarian cancer, fallopian tube cancer is not

routinely suspected in a patient with a complex pelvic mass. Because of the low incidence of PFTC, only about 4% (0.3- 15%) are diagnosed preoperatively [6], and up to 50% are missed intraoperatively [7].

Grossly, primary carcinoma of fallopian tube is seen as enlarged tube with fibrous adhesions and outer surface resembling that of chronic salphangitis. Some tumors arise in the fimbriated portion of the tube and directly exposed to the peritoneal cavity even if they do not invade the tubal wall. The cut surface shows a solid or papillary tumor filling the lumen [8]. In our case, fallopian tube was grossly distended (hydrosalphinx) and cut surface showed multiple focal papillary projections along the lumen.

Primary serous adenocarcinoma of the fallopian tube with papillary features is the most common histological type of primary tubal cancer (>90%) [9] as was seen in our case. Other types reported are endometroid (including spindle cell, oxyphilic, adenoacanthomatous, adenosquamous and squamous types), mucinous, seromucinous, clear cell and transitional cell.[8]. Microscopically, invasive papillary adenocarcinoma shows varying degree of differentiation. [10]

Management of fallopian tube carcinoma is surgery followed by adjuvant chemotherapy. Metastasis to the paraaortic lymph nodes has been documented in 33% of the patients with all stages of disease[10]. The prognosis of tubal serous carcinoma depends more on staging than histological grading. Fallopian tube cancer is staged according to FIGO[11]. Fallopian tube serous adenocarcinoma carries five-year survival rates of about 68-76% for Stage I disease, 27-42% for Stage II disease and 0-6% for Stage III and IV disease [12], so it is very important to diagnose these neoplasms in the early stages[13].

Fig 1a. Microscopy (Low power, 10X) shows broad papillae with epithelial stratification and irregular slit like spaces with micropapillary tufting.

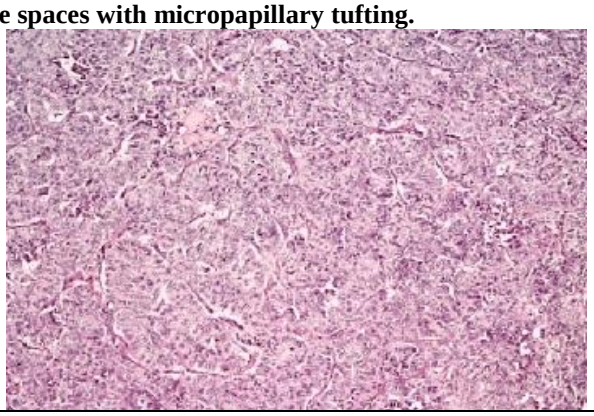


Fig 1b. Microscopy (Low power, 10X) shows tumor infiltrating upto lamina propria and muscularis layer.

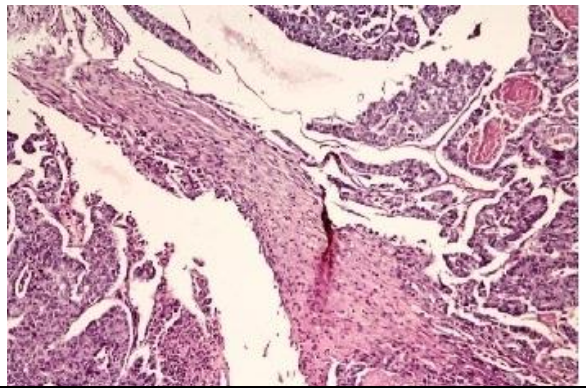
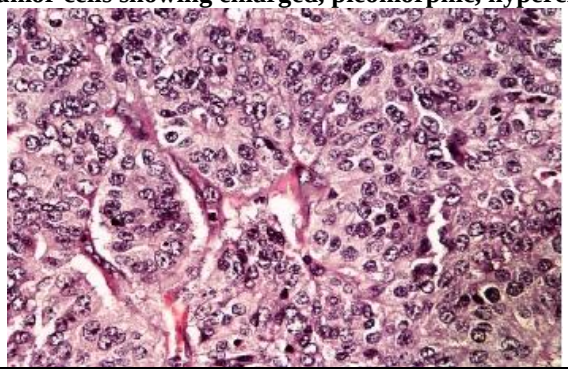


Fig 2. High power view(40X) of Tumor cells showing enlarged, pleomorphic, hyperchromatic nuclei.



CONCLUSION

A rare case of high grade serous carcinoma of fallopian tube was reported as an incidental finding in total abdominal hysterectomy specimen with bilateral salphingo-oopherectomy.

ACKNOWLEDGEMENT

Nil

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

REFERENCES

1. Riska A, Leminen A, Pukkala E. (2003). Sociodemographic determinants of incidence of primary fallopian tube carcinoma, Finland 1953-97. *Int J Cancer*, 104, 643-5.

2. Stewart SL, Wlke JM, Faster SL. (2007). The incidence of primary fallopian tube cancer in the United States. *Gynecol Oncol*, 107(2), 392-97.
3. Sedlis A. (1978). Carcinoma of the fallopian tube. *Surg Clin North Am*, 58, 121-9.
4. Slanetz PJ, Whitman GJ, Halpern EF, Hall DA, McCarthy KA, Simeone JF. (1997). Imaging of fallopian tube tumors. *AJR Am J Roentgenol*, 169, 1321-4.
5. Kol S, Gal D, Friedman M, Paldi E. (1990). Preoperative diagnosis of fallopian tube carcinoma by transvaginal sonography and CA-125. *Gynecol Oncol*, 37, 129-31.
6. Ajithkumar TV, Minimole AL, John MM, Ashokkumar OS. (2005). Primary fallopian tube carcinoma. *Obstet Gynecol Surv*, 60, 247-52.
7. Rose PG, Piver MS, Tsukada Y. (1990). Fallopian tube cancer. The Roswell Park experience. *Cancer*, 66, 2661-7.
8. Rosai J. (2004). Fallopian tube (including broad and round ligaments).In:Houston M,editor. Ackerman's surgical pathology. *Elsevier*; 1642-1643.
9. Vaughan MM, Evans BD, Baranyai J, Weitzer MJ. (1998). Survival of patients with primary fallopian tube carcinoma. *Int J Gynecol Cancer*, 8, 16-22.
10. Bhartiya R, Prasad KM. (2015). Bilateral Primary Adenocarcinoma of Fallopian Tube-A *Case Report. Int J Sci Stud*, 3(7), 276-278.
11. Pecorelli S, Odicino F, Maisonneuve P. (1998). Carcinoma of the fallopian tube. FIGO annual report on the results of treatment in gynecological cancer. *J Epidemiol Biostat*, 3, 363-74.
12. Semrad N, Watring W, Fu YS, Hallatt J, Ryoo M, Lagasse L. (1986). Fallopian tube adenocarcinoma: common extraperitoneal recurrence. *Gynecol Oncol*, 24, 230-5.
13. Cheul J, Yong S, Hae N, Eun KP. (2009). Primary Carcinoma of the Fallopian Tube-Report of Two Cases with Literature Review. *Cancer Res Treat*, 41(2), 113-116.