A RARE AND UNUSUAL CASE OF DERMOID CYST OF FALLOPIAN TUBE

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ABSTRACT: Benign solid teratomas within the fallopian tubes are very rare. They are found incidentally on laparotomy/by laparoscopy or mistaken for ovarian tumors or paraovarian cysts. Only 3 cases of teratomas have been reported. So this rare entity has been reported. **KEYWORDS:** Benign solid teratomas, laparotomy.

INTRODUCTION: Benign solid teratoma within the fallopian tube is very rare, though most of cystic teratomas are located in the isthmus or ampullary region. 58 cases have been reported all over the world and are found incidentally either on laparotomy or by laparoscopy¹. Out of which 30% were neoplastic in origin², more common were cystadenomas, cystadenofibromas and papillary borderline tumors. Hence a rare case of dermoid cyst attached to fimbrial end of the fallopian tube, found incidentally on laparotomy has been reported.

CASE REPORT: A 40yr old patient married since 25yrs with parity P_4 L_4 and last delivery 14 years back and tubectomised 13 yrs. back was admitted to gynecology ward in the Department of OBG,MIMS with history of white discharge and pain abdomen, on and off since 3 years. Her past history was positive for having treated for PID. Her past cycles were regular. Her past, family, present history was insignificant.

Physical examination; patient was anemic & vital parameters were within normal limits. Cardiorespiratory system was normal. B.P- 110/70 mm of Hg, pulse -70beats / min. On pelvic examination cervix was hypertrophied, cervical erosion was present. Uterus 12-14 week size, firm, irregular in contour, fornix free.

INVESTIGATIONS: Hb%-8.1gm%, O^{+ve} group. HIV, HB_sAg Non-reactive, VDRL negative, blood urea, serum creatinine, ECG, Chest X-Ray with in normal limits.

PAP SMEAR: Inflammatory smear

CERVICAL BIOPSY: Suggestive of endocervical glandular polyp.

A provisional diagnosis of fibroid uterus was made and posted for Hysterectomy. 2 units of blood were transfused preoperatively.

Patient underwent TAH with BSO under sub arachnoid block.

PER OPERATIVE FINDINGS: (1) uterus was 12-14 week size. Both ovaries were normal and both fallopian tubes were adherent to ovaries. Right fallopian tube had a twist & a cyst of 3×4 cm was attached to fimbrial end with a pedicle. It was solid in consistency & showed hair strands. On cut section it was gritty & partially cystic. Cut surface showed hairs, pultaceous material & yellow area. On microscopy, it was lined by keratinized stratified squamous epithelium. Fibrocollagenous strands

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showed foci of mature adipose tissue, thyroid tissue & space filled with mucoid material and lined by cuboidal cells & diagnosis of dermoid was confirmed. Post-operative period was uneventful and discharged on 7th post-operative day.

DISCUSSION: Mature solid and cystic teratomas are known to occur most commonly in the gonads. Extragonadal occurrence is observed primarily in the sacrococcygeal region, mediastinum, retroperitoneal cavity, cranial cavity or in the neck area^{3, 4}, Paraovarian cysts are presumed to come in the remnants of mullerian duct³. Pathogenesis of benign teratomas is still unclear and may develop from totipotent stem cells & reflects different biological potentials of various stem cells including meiotic germ cells & pluripotent embryonic cells & karyotype is 46XX^{4, 5}. Neoplastic paraovarian cysts originate from a neoplastic transformation of a paraovarian simple cyst or from adjacent ovary⁵. Study by Genadry et al^{6, 7} 5% of the malignant cystadenocarcinoma & according to Stein et al⁸ incidence of malignancy in paraovarian tumors was 2%.

CONCLUSION: Though fallopian tube tumors are very rare, still many are found on laparotomy or mistaken for ovarian tumors. They develop from totipotent stem cell & reflect different biological potentials of various stem cells including pluripotent embryonic cells. About 5-10 % undergoes malignant transformation of any one of the components like choriocarcinoma, adenocarcinoma, thyroid carcinoma, melanoma, squamous cell carcinoma^{6, 7, and 8}. Hence the importance of expectancy & to prevent spillage and preoperative diagnosis by ultrasonography which demonstrates papillary excressences on the internal cyst walls in malignancy and may cause intraperitonial dissemination.

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CASE REPORT



Dermoid cyst in the fimbrial end of right Fallopian tube



HPE of dermoid showing keratinized squamous epithelium,adipose tissue and thyroid tissue.

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