Symptoms are perimenopausal and postmenopausal bleeding per vagina followed by amber-coloured vaginal discharge and abdominal pain. But all these features are present in 6% of cases. Tubal carcinoma usually originates in the ampulla and its pattern of growth can be nodular, papillary, and infiltrative.

These tumors are relatively confined to the tube and may not have any alteration in size and shape of the fallopian tube, or it may feature diffuse swelling, a sausage-shape resembling hydro, hemato, and pyosalpinx. Histo-pathological examination reveals a papillary adenocarcinoma extending into submucosa and muscularis layer, as was seen in our case. Preoperative diagnosis of the fallopian tube carcinoma is seldom made prior to surgery. It is suspected in fewer than 5% of cases preoperatively. Primary ovarian neoplasm is the most common preoperative diagnosis made in these patients. Since it is difficult to differentiate the primary fallopian tube carcinoma from epithelial ovarian cancer, Hu et al established diagnostic criteria for their differentiation in 1950, which were modified in 1978. Patients with at least one of the following criteria should have the diagnosis of primary fallopian tube carcinoma.

- The tumour arises from the endosalpinx.
- The histological pattern reproduces the epithelium of tubal mucosa.
- Transition from benign to malignant epithelium is found.
- The ovaries and endometrium are either normal or contain less tumor than the tube.

The tumor spread occurs by means of contiguous invasion, transluminal migration, and hematogenous dissemination. Transluminal migration may be the cause in our case. Primary adenocarcinoma of fallopian tube with papillary features is the most common histological type forming more than 90% of malignant tumor. The most important prognostic factor in the fallopian tube carcinoma is stage of disease at laparotomy. Tumor marker such as CA 125 is proving to be of help in the diagnosis of fallopian tube carcinoma. Levels of CA 125 rise with the advanced stage of disease.

In conclusion, fallopian tube carcinoma is a rare type of genital cancer, which is difficult to diagnose early and carries a poor prognosis.

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Figure 3: Microsection shows nests of adenocarcinoma in an otherwise unremarkable ovarian stroma (H and E, ×100).

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Congenital Ovarian Cyst: A Report of Two Cases

Sir,
A congenital ovarian cyst is a rare clinical entity which can be diagnosed during antenatal ultrasonography. Although
Letters to Editor

Table 1: Causes of fetal/neonatal intraabdominal cystic masses

| System          | Condition                                      |
|-----------------|------------------------------------------------|
| Urinary system  | Renal cysts (multicystic renal dysplasia, polycystic kidney disease) |
|                 | Hydronephrosis                                 |
|                 | Distended bladder                              |
| Digestive system| Urachal cyst                                   |
| Reproductive system| Ovarian cyst                             |
| Digestive system| Meconium pseudocyst                            |
| Digestive system| Mesenteric/omental cyst                        |
| Digestive system| Liver/spleen cyst                              |
| Reproductive system| Hydrometrocolpos                    |
| Miscellaneous   | Hemangioma                                     |

The genesis of fetal/ovarian cysts is controversial. It results from fetal exposure to maternal gonadotrophins and is observed in newborns whose mothers have increasing levels of HCG (diabetes mellitus, Rh isoimmunisation, toxaemia). A precocious FSH peak between 20–30 weeks of gestation and abnormal HCG peak due to disorders of theca interna may also be contributory. Prematurity and fetal hypothyroidism are also associated. [3]

Case 1: A 28-year-old female delivered a female baby by normal vaginal delivery at term. Antenatal ultrasound during the third trimester revealed a large thin-walled unilocular abdominal cyst measuring 6.2×6.1 cm in the right side of fetal pelvis. On the 10th day of postnatal life, the baby presented with mass felt per abdomen. A computed tomography scan (CT scan) demonstrated a well-defined hypodense lesion measuring 6.8×6.7×4 cm in the pelvis suggesting an ovarian cyst. Cystectomy was performed. Grossly, a large smooth walled gray white unilocular cyst, 6 cm in diameter filled with straw colored serous fluid, was seen. Microscopy revealed a corpus luteal cyst [Figure 1].

Case 2: A 25-year-old female delivered a female baby by a caesarean section. No antenatal records were available. On the third postnatal day, the baby presented with distension abdomen. CT scan showed a huge (11.7×11.5×5 cm) unilocular cyst arising from left side of pelvis, occupying whole of abdomen. Due to its large size, immediate resection was performed. Grossly, strips of the thin smooth cyst wall were received. Multiple sections examined microscopically revealed a cyst wall composed of ovarian stroma enclosing dilated and congested blood vessels. However, no lining epithelium could be identified in the multiple sections studied [Figure 2]. A possibility of a follicular/simple serous cyst was suggested.

A variety of cystic masses can be seen in fetal/neonatal abdomen [Table 1]. Out of the listed causes, ovarian cysts are the most common intra-abdominal cyst in female neonate. It is a relatively rare condition with approximately 100 neonatal cases reported in the literature. The first case of an ovarian cyst was reported in 1889 in a stillborn premature. [1] In 1942, Bulfamonte reported the first case of a successfully treated ovarian cyst during the neonatal period. [2] The first antenatal observation of ovarian cyst was done by Valenti. [3]
The majority of the ovarian cysts are benign cysts of germinal/granulosa origin such as follicular, theca-lutein cyst, corpus luteum cyst, and simple cyst in which lining epithelium is destroyed. These are benign, functional cysts which result from enlargement of otherwise normal follicles present in third trimester and early neonatal period. Most of the cysts are unilateral and unilocular. The size may vary from small to giant cystic masses occupying the entire abdomen. Most of the ovarian cysts are asymptomatic, or the symptoms are nonspecific. A large cyst may cause urinary tract obstruction, thoracic compression with pulmonary hypoplasia, and even sudden death.[3] These cyst have been classified by Nussbaum into simple/uncomplicated and complex/complicated (fluid debris level, clot, septae echogenic wall).[8] Common complications include torsion (50-78%), rupture, hemorrhage, compression of other viscera, autoamputation.[9,4] With increased use of prenatal ultrasonography, the detection rate for these cysts has increased considerably. Up to 34% of the fetuses may have antenatally detectable cysts.[9] Few case reports documenting neonatal ovarian cysts have been reported.[9,7,9] Few of the cases documented in the literature were complicated cysts presenting with torsion[11] unlike both of our cases which were unilateral, simple without any associated complications.

Spontaneous regression occurs in 25-50% of cases and is more frequent with smaller cysts.[10] It has been proposed that postdelivery, as the anterior pituitary starts the negative biofeedback mechanism, the abnormal gonadotrophin secretion is discontinued, and many of these cysts regress spontaneously although regression may take up to 10 months.[4] Regarding management, small simple cysts under 4 cm in diameter can be kept under observation by serial ultrasonography scan. However, all complicated ovarian cyst and simple cysts >5 cm diameter should be treated surgically. Minimal access surgery/laparoscopy, being well tolerated by neonates, can be used for aspiration, marsupilization, cystectomy, and oophorectomy[11] or the more conventional open approach can be used.

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