BENIGN CYSTIC TERATOMA IN A TWO-YEAR-OLD CHILD: A CASE STUDY

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SUMMARY

A case of benign cystic teratoma, sufficiently large to present as an abdominal mass with pressure signs on the right ureter in a two-year-old child is presented, the lowest age in this country recorded.

INTRODUCTION

Ovarian tumours are seen in females of any age. Although ovarian tumours account for 1 – 2% of all tumours in childhood, the most frequent are germ-cell tumours and 20% of them are malignant during the first decade of life. The youngest female with an ovarian tumour recorded was in a 30-week old foetus.[1] The youngest female with a benign cystic teratoma has been reported to be 16-months old. We report here a case of benign cystic teratoma sufficiently large enough to present as an abdominal mass and causing pressure effects on the right ureter in a two-year-old child.

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CASE HISTORY

A female, Malay child, aged two years was referred to the Hospital Universiti's Paediatric Unit from a district hospital on 17 August 1985 for evaluation and treatment of a painless mass in the right-side of the lower abdomen of two month's duration. The mass was initially noticed by her father.

On general examination, the child was healthy and active with no abnormalities in the cardio-vascular, respiratory, urinary or nervous systems.

Examination of the abdomen revealed a mass occupying the right lower abdomen, partly mobile, non-tender with a smooth surface measuring about 8 cm x 4 cm. There was no family history of any siblings born with any congenital defects or similar disease.

Routine haematological and urine examination were normal. Chest X-ray showed a normal heart and lung fields. In the plain X-ray of the abdomen (AP and lateral view), a clear soft tissue shadow was noticed around the level of the third lumbar vertebra (Fig. 1). Intra-venous urogram showed a delay in the emptying of the right kidney in the 25 minutes skiagram, and a dilated calyceal system. The bladder was normal (Fig. 2). Real-time ultra-sonography showed a spherical-shaped cyst of the

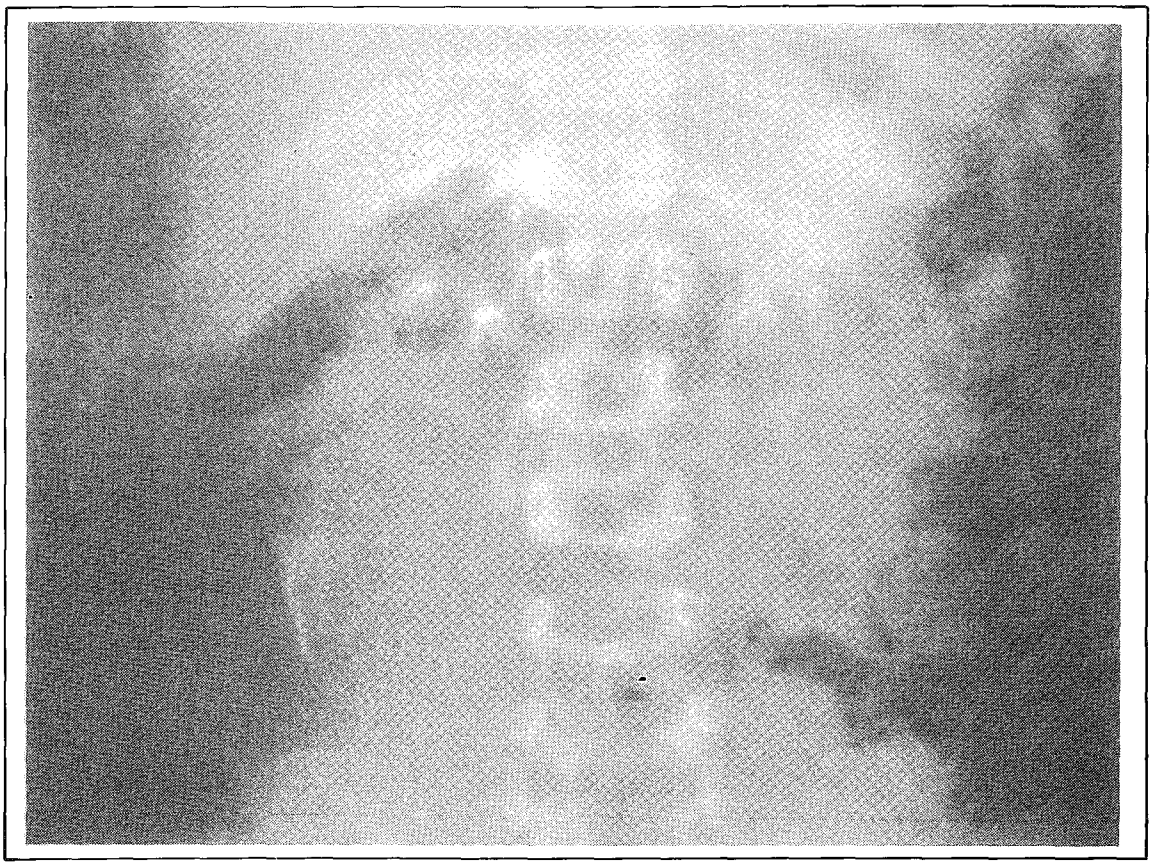

Fig. 1 Intravenous urogram showing delayed emptying and dilated calcyceal system-eight side:25 minutes skiagram.

right ovary with well-defined margins and a localised echogenic portion within the cyst.

A diagnosis of right ovarian tumour, probably a dermoid cyst was made preoperatively, on the clinical, radiological and ultrasonographic findings. This was confirmed at laparotomy performed on 21 August 1985.

A relatively large dermoid cyst measuring about 8 cm x 4 cm with the fallopian tube stretched over it, with some omental adhesions was seen at laparotomy (Fig. 3). The uterus, opposite ovary and the urinary bladder were all normal. The right ureter appeared slightly dilated. A right ovarian cystectomy was performed and the abdomen closed in layers.

Histopathological report on the specimen was, a benign cystic teratoma containing cartilage, glial tissue and foreign body giant cells.

DISCUSSION

More than 60% of ovarian tumours in the younger age group are germ cell tumours and the most frequent is benign cystic teratoma. Malignant tumours form nearly 25% in girls under 15 years of age.[2] The interest in this case centres around two features namely the very early age, and the relative size of the tumour.

Even though teratomatous tumours were first detected in the ovaries, it is now known that, tumours containing all the three germ cell layers are found in other locations like the mediastinum

Fig. 2 Well-defined soft tissue spherical tumour with granular opacities: no bony erosion.

and retroperitoneal tissue. It is interesting to note that teratomas outside the gonad are detected at an earlier age, whereas benign cystic teratoma of the ovaries have a peak incidence in the first and second decades of life.[3]

Detection of these benign teratomatous lesions therefore depends mainly on the site, size or the symptoms they produce. In the case of the ovaries, it is mostly the size or the symptoms, largely as a result of complications, the commonest being torsion.

Torsion is a likely complication in this case if not for the omental adhesions that was noted.

Fig. 3 The cyst at laparotomy, with some adhesions to the omentum.

This is in view of the fact that the cyst has been pushed out of the pelvis into the abdominal cavity with its long pedicle. In one large series of ovarian tumours in childhood, collected by Lindfors from Finland and Sweden, out of 81 cases, torsion was present in 23%. Pressure symptoms, specially on the ureters noted in this case is rather uncommon with dermoid cysts in adults.

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