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UNUSUAL PRESENTATION OF OVARIAN IMMATURE TERATOMA IN AN ADOLESCENT GIRL BY BILATERAL HYDROURETER-HYDRONEPHROSIS: A CASE-REPORT

Mohamed Rezk*

Department of Obstetrics and Gynecology Faculty of Medicine, Menoufia University, Menoufia, Egypt.

Corresponding Author:- **Mohamed Rezk**
E-mail: m_rezk9207@yahoo.com

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ABSTRACT
Our reported case was a 12-years old adolescent girl presented with bilateral loin pain, dysuria, recurrent urinary tract infections (UTI) and pelvi-abdominal swelling at Menoufia governorate in Egypt. Her clinical data were collected by history-taking, clinical examination, laboratory investigations including tumour markers, transabdominal ultrasonographic examination, intravenous pyelography and C.T. scan. Exploratory laparotomy was done with left salpingo- oophorectomy performed. The histo-pathological study of the excised surgical specimen revealed an ovarian immature teratoma grade I. This case report emphasizes the possibility of growing in a malignant ovarian germ cell tumour reaching to a huge size compressing the urinary system.

INTRODUCTION

Although mature cystic teratoma is being the commonest ovarian tumour, immature teratoma represents 3% of all teratomas, 1% of all ovarian cancers and 20% of malignant ovarian germ cell tumors [1]. The tumor usually contains immature primitive neuroectodermal tissue. Immature elements represent the evolution of a malignant clone, and the prognosis relates to the amount of this component [2]. Immature ovarian teratoma is almost always unilateral and is a tumor of children and adolescents, that occurs essentially during the first two decades of life [3].

This report presents a case of a huge ovarian immature teratoma in a dolescent girl, causing bilateral hydrureter-hydronephrosis.

Case Presentation

A12 years-old adolescent girl with no history of medical disorder or any gynecological problem presented with recurrent UTI and underwent urine analysis, renal function tests and abdominal ultrasonography which revealed huge cystic pelvi-abdominal swelling and referred for Gynecological consultataion. On examination a large cystic pelvi-abdominal swelling reaching to the xiphisternum, mobile and slightly tender.

C.T. scan was performed and revealed right ovarian cystic mass measuring 15x 20 cm with solid component with no ascites and no other abnormality. Intravenous pyelography revealed bilateral hydroureter-hydronephrosis (Figure1).

Tumour markers in the form of CA-125, CA-19-9, lactate dehydrogenase, α-fetoprotein and β-hCG were not elevated.

Our patient and her family were counseled and signed informed consent for surgical exploration with fertility sparing surgery. Under general anaesthesia, an initial midline subumbilical incision was done where a huge cystic mass was noticed arising from the left adnexa. Later on, the incision was extended up, about 5 cm below xiphisternum, to deliver the cystic mass intact without exposed it to the risk of rupture inside the abdomen. The outer surface of the mass was smooth, regular and intact all around with no external growths or adhesions. The uterus, right adnexa, and appendix were looking healthy. No ascites or enlarged para-aortic lymph nodes were

discovered. Left salpingo- oophorectomy was performed. The size of the tumour was 15 × 20 × 7 cm and 3200 gm in weight (Figure 2).Microscopic examination revealed immature teratoma grade I with numerous mitotic figures. Postoperative recovery was uneventful and the patient was discharged on the 3rd postoperative day and referred to Oncology department. The patient was scheduled for three cycles of platinum based chemotherapy.

Figure 1. IVP revealed bilateral hydroureter-hydronephrosis (arrows).

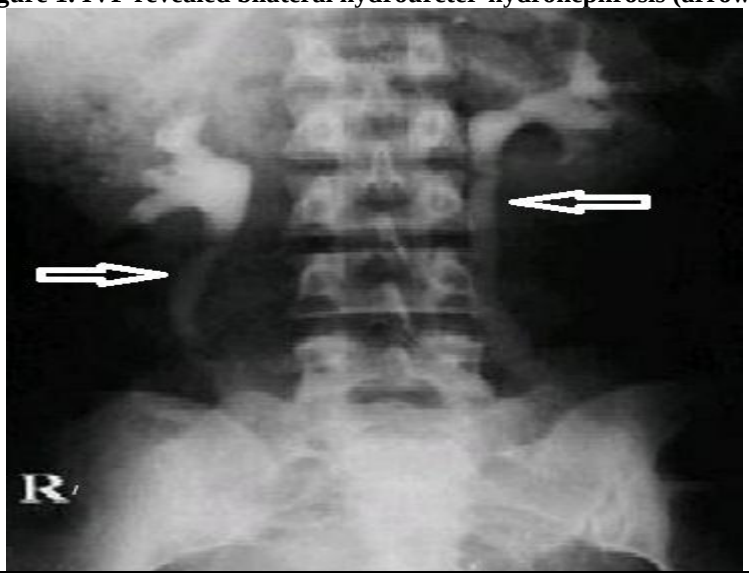

Figure 2. The pelvi-abdominal swelling before and after surgical removal

DISCUSSION AND CONCLUSION

Immature teratomas generally affect younger patients, and are much less common than mature cystic teratomas, representing just 1–3% of ovarian teratomas. Clinically, they behave as malignancies. Histologically, immature cystic teratoma is distinguished by the presence of embryonic tissues. Other characteristics of the immature teratoma are believed to be similar to those of mature cystic teratoma [4-6].

The 5-year survival rate of immature teratoma stage I is 90–95%, whereas advanced-stage survival drops to about 50% [7].

In summary, immature teratoma of the ovary usually affects young children but may reach to a large size compressing the nearby pelvic structures. Fertility-sparing surgery is feasible in such cases with proved efficacy and long term benefit. In our case, conservative left salpingo-oophorectomy was done to preserve the patient's fertility without compromising her overall survival.

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

STATEMENT OF HUMAN AND ANIMAL RIGHTS

All procedures performed in human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

REFERENCES

1. Quirk JT, Natarajan N. (2005). Ovarian cancer incidence in the United States, 1992–1999. *Gynecol Oncol*, 97, 519–523.
2. Calder CJ, Light AM, Rollason TP. (1994). Immature ovarian teratoma with mature peritoneal metastatic deposits showing glial, epithelial, and endometrioid differentiation: A case report and review of the literature. *Int J Gynecol Pathol*, 13, 279-82.
3. Gershenson DM. (2007). Management of ovarian germ cell tumors. *J Clin Oncol*, 25, 2938-43.
4. Talerman A. (1992). Germ cell tumors. *Curr Top Pathol*, 85, 165–202.
5. Reddihalli PV, Subbian A, Umadevi K et al. (2015). Immature teratoma of ovary - outcome following primary and secondary surgery: study of a single institution cohort. *Eur J Obstet Gynecol Reprod Biol*, 192, 17-21.
6. Nechushkina IV, Karseladze AI. (2015). Ovarian germ cell tumors in girls. *Vopr Onkol*, 61(2), 239-43.
7. Mann JR, Gray ES, Thornton C et al. (2008). Mature and immature extracranial teratomas in children: the UK Children's Cancer Study Group Experience. *J Clin Oncol*, 26(21), 3590–7.