Isolated Right Fallopian Tube Torsion with Haematosalpinx and Left Dermoid Cyst in a 10 Years Old Monarchial Girl: A Case Report

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Abstract— 10 years old girl, presented with severe lower abdominal pain, nausea and vomiting. During examination, she was found to be afebrile, she has pain in both adnexal areas. An u/s was showed huge adnexal mass with query torsion. A CT abdomen and pelvis revealed left adnexal teratoma. Laparotomy was done and the diagnosis confirmed, Isolated right fallopian tube torsion with haematosalpinx. It was then untwisted and regained its color and salpingostomy was done. The left ovary had 2 cysts one of which was a simple cyst And the other was teratoma as confirmed by histology.

Index Terms— Adenexal teratoma, cystic teratoma, fallopian tube tortion, haematosalpinx, ovarian tortion, ovarian teratoma, ovarian cyst,.

INTRODUCTION:

The diagnosis of abdominal pain in young women is still a challenge. Ovarian mature cystic teratoma are "common, benign, pelvic tumors that are easily detected by pelvic ultrasonography"(1). However, an ovarian teratoma in a teenage girl during her 1st months of puberty is rare(2). Abdominal pain due to isolated tubal torsion is also extremely rare especially in the young and of utmost importance in regards to future conception capacity and potential complications of possible pregnancies(3)(4). In this report, we describe the case of a patient with such a presentation, very few similar cases in pediatric patient have been published to date.

CASE REPORT:

In our case report, we describe a 10 year old Afro-Asian girl in her 1st few months of puberty who presented to our hospital complaining of lower abdominal pain, nausea and vomiting. The abdominal pain started 4 days back, comes and goes, colicky in nature with no relieving or aggregating factors, associated with nausea and vomiting yellow, small amount and no blood. The pain was out of proportion when she visited our hospital. She has a history of vomiting when she was 2 years of age and stopped one year later, she also had constipation that starter around the same time and went away when she became 5. When she was 3 years of age she started gaining weight, her BMI now is 35. Her 1st period was on May 2015 normal in amount lasting 2 days with no associated pain. Regarding her mother's pregnancy she was delivered at a gestational age of 41+, spontaneous vaginal delivery with no complications and a birth weight of 3 Kg. There is no past medical history or family history of similar condition and her social economic status is good. Upon presentation she was found to be afebrile, during her physical examination she has pain in both adnexal areas, her labs revealed that her white blood cell count was 17.200/ml with 88.3% neutrophils. Other laboratory results were within normal ranges. An u/s was arranged and showed huge adnexal mass with query torsion. A CT abdomen and pelvis revealed left adnexal teratoma 17 x 8 x 5 cm with enlarged 5 x 4 x 4 right ovary raising the possibility of right ovarian torsion. A pfannenstiel incision was made and the peritoneal cavity was found filled with fluid that was suctioned, the right ovarian tube was torted once and dark in color with haematosalpinx [Fig1], [Fig2]. It was then untwisted and regained its color and salpingostomy was done. The left ovary had 2 cysts one of which was a simple cyst 6 x 5 cm And the other 3 x 2 query teratoma [Fig3] which were all sent for histology. According to the histology report The left ovarian cyst and left ovarian specimens: Showed mature cystic teratoma. The left hemorrhagic specimen: Showed serous cystic adenoma with hemorrhagic changes.

DISCUSSION:

An isolated torsion of the fallopian tube usually occurs in the reproductive years and rarely in the pediatric ages (5). The symptoms of tubal torsion are of uttermost importance in order to save the fallopian tube and preserve fertility, patients usually present with lower abdominal pain, nausea, vomiting, adnexal masses and rarely signs of lower urinary tract infections (6) . Means of diagnosing this entity are also impotent, u/s and CT can help show a mass but rarely differentiate the type of mass (7). There are no clearly identified risk factors for the development of isolated torsion of the fallopian tube in the pediatric population, but congenital malformation of the tube in could be a significant risk factor [8].The associated haematosalpinx could be a consequence of arterial compromise and usually present in the right side due to the sigmoid colon being on the left thus preventing adnexal movement or due to slow venous return on the affected side.(9)(10). Teratoma are composed of multiple embryologic layers the mature type is benign being the most common 10-20 % of ovarian tumors whilst the immature type is also benign but with a more aggressive course(11)(12). The increasing levels of estrogen and progesterone have been implicated to be the cause of these teratoma after puberty and the regress postmenaupause, u/s and tumor markers CA125, CA19-9, and alpha-fetoprotein are common tools in the detection of these teratoma (13). In our case and the presentation of acute lower abdominal pain with no elevation of BHCG and after the detection of the left adnexal teratoma and the right ovarian torsion by CT scan she underwent and exploratory laparotomy hence the bilateral adnexal pain and the radiological findings, the histopathological report confirmed the presence of mature cystic teratoma on the left side and serous cystic adenoma with hemorrhagic changes along with torsion on the right. The mainstay of management is laparoscopy but laparotomy is the preferred way of approach (14) to provide definitive diagnosis, symptomatic relief, and prevent complications.

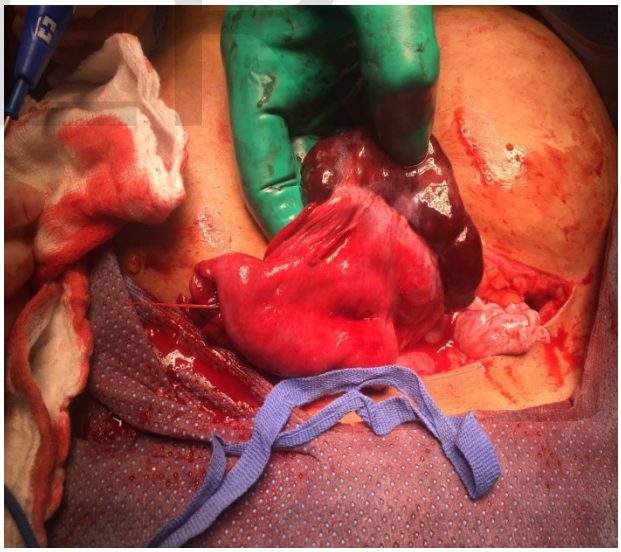
CONCLUSION:

Torsion of the fallopian tube due to haematosalpinx should be considered in premenarcheal and in the early months of menarche and surgery can preserve the tube and thus fertility, torsion is rare in the young age but should be in the differential diagnosis when facing a patient with similar symptoms. The presence of ovarian cyst in a young age should also raise the suspicion to teratoma and the physician whether he was a pediatric surgeon or an obstetrician should be aware of both entities and approach the management as soon as possible in order to preserve fertility and further complications.

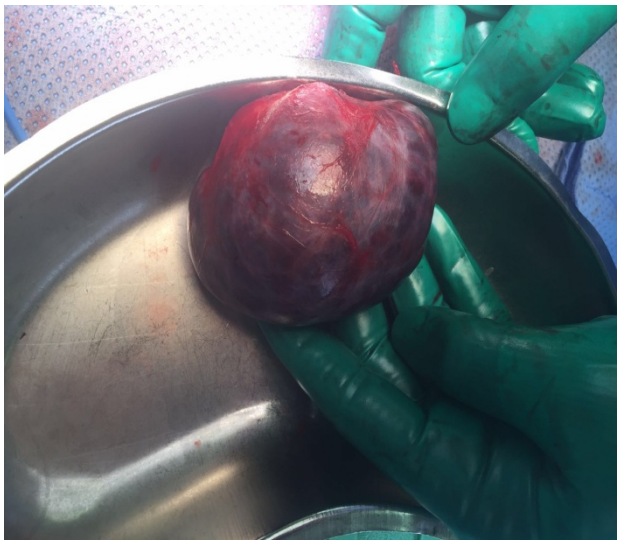
CONSENT:

Written informed consent was taken from the legal guardian for publication of the case and pictures.

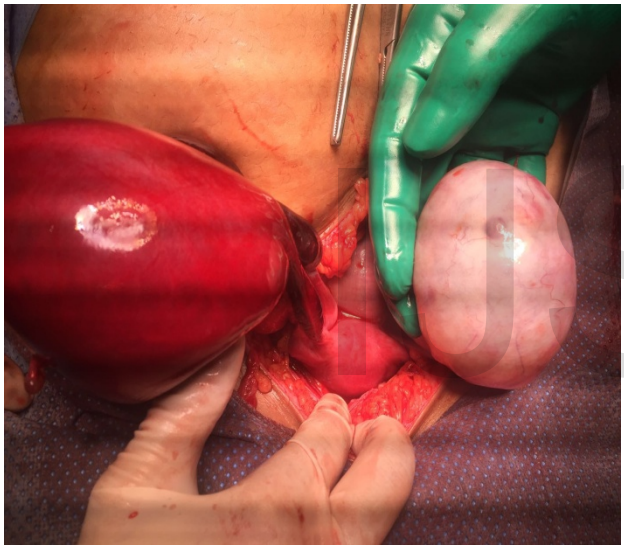
FIGURES:



(Figure 1 : right ovarian torsion)



(figure 2 : haematosalpinx in the right fallopian tube)



(Figure 3: right fallopian tube enlarged left ovarian cyst and left teratoma)

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