

Original Research Article

A STUDY ON ADENEXAL MASSES IN PREGNANCY

ABSTRACT

Introduction : With routine obstetric ultrasound examinations, ovarian cysts are now more commonly diagnosed during pregnancy and their management is still a challenging clinical issue among obstetricians. Ovarian cysts are a frequent benign pathology that requires surgical treatment in fertile women. **Materials and Methods :** We evaluated adnexal masses discovered during the cesarean sections, based on inpatient and operative records, birth and pathology registries. Cases with adnexal masses benefited usually of surgical treatment during the cesarean section, cystectomies, ovariectomies and rarely adnexectomies being performed. **RESULTS :** In the study period of three and half years, 40 women with adnexal masses were recognized during abdominal procedures, done in pregnancy. 22 women had cysts size measuring more than 4 cm, and 1 woman had bilateral clear cyst. Though various studies have shown dermoid to be the most common pathology, we found clear cysts in 11 women. **Conclusion:** Surgical management of adnexal masses during caesarean section can and should be performed at this time avoiding later surgery for this incidental pathology.

Key words : ovarian cyst, pregnancy, caesarean section, clear cyst, dermoid

Introduction

With routine obstetric ultrasound examinations, ovarian cysts are now more commonly diagnosed during pregnancy and their management is still a challenging clinical issue among obstetricians. 1. Ovarian cysts are a frequent benign pathology that requires surgical treatment in fertile women [2]. Frequency of ovarian cancer is reported between 1 out of 15,000 and 1 out of 32,000 pregnancies. A surgical intervention is necessary if suspect signs are observed at ultrasonographic examination. 3 First trimester aneuploidy screening or just routine prenatal ultrasound scans can reveal adnexal masses in early pregnancy up to 1-2% of total pregnancies, which need careful consideration and management [4]. To avoid a delay in diagnosis of a malignancy and to eliminate future surgery, a good inspection and if necessary surgical treatment of the adnexa pathology is required during the caesarean section .5

Materials and Methods

This retrospective study was performed between the 1st of January 2012 and 31st May 2015 in the Department of Obstetrics, of ESICMCPGIMS hospital, Bangalore, located in India. We

evaluated adnexal masses discovered during the cesarean sections, based on inpatient and operative records, birth and pathology registries. Cases with adnexal masses benefited usually of surgical treatment during the cesarean section, cystectomies, ovariectomies and rarely adnexectomies being preformed. In our hospital during the cesarean section uterus, adnexa are regularly examined for any abnormalities or anomalies, so as to detect early and treat for the benefit of the patients.

RESULTS

In the study period of three and half years, 40 women with adnexal masses were recognized during abdominal procedures, done in pregnancy. Out of 40 women, 15 were primigravida, rest were multiparous. 25 adnexal masses including ovarian cysts and fimbrial cysts were observed during caesarean sections done in iii trimester while 15 were observed during I trimester on laparotomy. 22 women had cysts size measuring more than 4 cm, and 1 woman had bilateral clear cyst. Though various studies have shown dermoid to be the most common pathology, we found clear cysts in 11 women, fimbrial cysts in 11 women, mucinous cystadenoma in 5, serous cystadenoma in 2, corpus luteal cyst in 4, hemorrhagic cyst in 2, dermoid in 1, paraovarian cyst in 1, hydatid cyst of moragni in 1, endometriosis in 2 women. Conservative approach was followed for 26 women, while cystectomy was performed in 10 women, fluid aspiration was done in 4 women. We have not noted even single carcinoma among any of the pregnant women during these years.

Discussion

Adnexal masses can be frequently diagnosed in pregnancy (up to 1-2% of all pregnancies) due to improvement of ultrasound examination and more interest in first trimester aneuploidy assessment. As many of these cysts will spontaneously resolve by the second trimester and the risk of malignancy is low, a conservative management during pregnancy is advised. Ultrasound has a great value in the diagnosis and monitoring of adnexal masses in the first and beginning of the second trimesters of pregnancy, but later on, as the uterus enlarges, the correct diagnosis is hard to establish. Many authors observed that the increasing caesarean section rate correlates positively with increasing incidental adnexal mass rate. This phenomena has a multitude of causes grouped in medical causes (a better investigation of the pregnancy, elder patients), patient causes (patients' will influenced by mass media, fashion, incorrect information), doctor concerned reasons (more comfortable, less law suites, safer way), clinic reasons (a more relaxed attitude concerning this problem). Obstetricians can find themselves facing another dilemma during cesarean section when they incidentally discover an adnexal mass regarding the medico-legal issues on the informed consenting process [6,]. Most of the patients didn't have antenatal diagnosis of the adnexal mass, making the finding at caesarean section time an incidental one, as seen in other papers too. Literature indicates dermoid cyst to be the most common pathological finding, but the percentage varies considerably (28-50%) [4]. Dede and Hoffman conclude that at the time of cesarean section incidental adnexal masses should be surgically removed, avoiding later surgery and establishing malignancy status of the mass. Leiserowitz adds that ovarian masses should be removed intact when possible, especially in suspicious cases. Cystectomy is the recommended procedure, ovariectomy and ovariectomy with salpingectomy being reserved for complex cases. In case of suspicion of malignant masses during the surgical examination, Surgical treatment of the adnexal masses has to be performed with adequate staging and debulking equal to the treatment of non-pregnant women. However, whereas during organogenesis abortion has to be

considered prior to chemotherapy, later in pregnancy surgical debulking as complete as possible, followed by taxol-platinum chemotherapy is indicated. If the fetus is not viable at the time of primary surgery, neoadjuvant chemotherapy and complementation of surgery after delivery of the baby should be performed. It should be stressed that chemotherapy for ovarian cancer applied during pregnancy appears to be safe. However, no studies have evaluated the long-term consequences for children exposed to intra-uterine chemotherapy. Aspiration of cysts should be avoided, as the correlation between the histological evaluation of an ovarian malignancy and the cytological evaluation of aspirates is poor. Moreover, spillage of malignant cysts is hazardous for the patient.⁷

Tumor markers (CA 125, Roma score) are helpful in the management of adnexal masses, especially for follow up. We agree that frozen section offers a great help in making an intraoperative decision, but unfortunately our obstetric department doesn't have a 24 hours frozen section examination available. Another aspect we want to underline is that in our clinic few obstetricians have the oncological surgical competence and we think that referral of the patient to an oncological centre after cesarean section will not influence negatively the patient's chances. There are no complication or increase of morbidity and mortality in our series of patients and based also on the literature review, we consider that surgical removal of incidental adnexal masses during cesarean section is a safe surgical act.⁸

3. Evacuation by puncture is not well evaluated and is not recommended during pregnancy.

1. Emerging evidence suggests that if surgery is necessary, then it is preferable to perform an elective laparoscopic procedure at 16 – 23 weeks' gestation.²

5. Conclusion

Surgical management of adnexal masses during caesarean section can and should be performed at this time avoiding later surgery for this incidental pathology. We didn't observe complications or higher rates of morbidity and mortality associated with surgery for adnexal masses during cesarean section.

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