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Acute Surgical Emergency Management in Obstetrics 3rd Trimester Patient.

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Abstract: *Acute appendicitis can occur any time during pregnancy. Ocuurs most often during 2nd trimester (45%), 30% during 1st trimester & remaining 25% in 3rd trimester. Overall incidence being 0.15 to 2.10 per 1000 pregnancies. Maternal deaths are rare in cases of simple appendicitis but increases to 2% with advanced pregnancy & perforated appendicitis while fetal mortality ranges from 0-1.5% in cases of simple appendicitis to 20-30% in perforated appendicitis.*
We are reporting case of a 31 week ANC patient with perforated appendix.

I. Introduction

Acute appendicitis was first diagnosed in 1886.

1. It is the most common extra-uterine surgical emergency encountered during pregnancy.

2. The etiology and pathogenesis of it is not known although many theories have been proposed; including mechanical obstruction of the appendiciel lumen, breakdown of the mucosal barrier of the appendix due to direct invasion of a pathogen, and the inflammatory response triggered by pathogens or other stimuli.

3. The diagnosis and management of acute appendicitis in pregnancy can be a challenge because of the non-classical clinical presentation and the complications of a perforated appendicitis which carries a high rate of maternal and fetal death. Thus, achieving an accurate diagnosis and starting early treatment are crucial to prevent complications. This case reviews the clinical diagnosis, investigations, and treatment of perforated appendix in pregnancy.

. **Case Presentation:** A 24 yr young female patient 31 weeks ANC presented with burning sensation in epigastric region & vomiting in MGM MEDICAL COLLEGE & HOSPITAL, AURANGABAD.

On examination patient had mild tenderness in Right hypochondriac region & tense abdomen. Diagnosis was clinical, depending upon detailed history including presenting signs & symptoms. Laboratory findings were supportive, ultra sonography of abdomen revealed perforated necrotizing appendix. Patient underwent emergency laparotomy successfully measuring about approximately 13.2cm in length & 1.6cm in its largest circumference which was perforated at its tip. Intra operative care of uterus was taken, base of appendix was transfixed & through wash was given with NS & patient was shifted to ICU after extubation for further management.

II. Discussion

The pregnant patient with appendicitis presents unique challenges to both the surgeon & gynecologists.First, diagnosis of pregnancy needs confirmation at time of presentation.Secondly, Anemia & physiological changes that normally occur during pregnancy alter physical findings & laboratory values that are often used for diagnosis of appendicitis.Thirdly, cases of appendicitis that occur during pregnancy can produce significant morbidity & mortality if not promptly identified & treated. Fourthly, the treating surgeon has limitations in the use of certain diagnostic procedures because of possible teratogenicity like intravenous pyelography & X-ray abdomen.Finally the surgeon is treating two patients simultaneously, the mother & the fetus & must be aware of the potential effects of treatment on both patients at all times.Blood tests, particularly the white blood cell count (WBC) is usually done to confirm or exclude the suspected appendicitis in patients with right lower quadrant pain. However, it may not be helpful and reliable in pregnant women as leukocytosis (WBC count as high as 16000/µL) and bandemia (immature WBC) are normal physiological alterations during pregnancy.

C-reactive protein (CRP) can also be used but is unreliable.

Diagnostic imaging may be considered in doubtful cases. Ultrasonography (USG) has been used for investigation of right lower quadrant pain in gynecological patients. It can also visualize the inflamed appendix. Some of the features noted during ultrasonography are: appendix measures more than six mm or more in diameter, thickening of the appendiceal wall, and presence of peri-appendiceal fluid or faecolith.

The USG is therefore a very useful tool to diagnose appendicitis in pregnancy due to its high sensitivity (75-90%) and specificity (75-100%) is relatively cheap, fast and noninvasive.However, as the pregnancy

advances, the diagnosis becomes more difficult because of the shift in the position of the appendix. In the West, helical computed tomography scanning (CT scan) is becoming popular as a tool to diagnose appendicitis because of its accuracy, but it is definitely contraindicated in pregnancy especially in the first trimester because of the radiation exposure.Another imaging tool that is useful to diagnose appendicitis is the magnetic resonance (MRI). A report in the United States proved a definitive diagnosis of perforated appendicitis in a second-trimester pregnant woman but the long-term effects of the static magnetic field to the fetus is still not known.In our case we preferred open surgery as it is believed to be better & generally preferred over laparoscopic method in the late 2nd & 3rd trimester. It has main advantage of better visualization of the peritoneum, shorter operating time, less exposure of the fetus to carbon dioxide, less risk of pneumoperitoneum & lower costs. As exposure of carbon dioxide is less in open surgery. No long term adverse maternal & pre term neonate mortality was reported.

III. Conclusion

Acute appendicitis is a common cause of an acute abdomen in a pregnant patient. Due to the potential harm to the fetus and mother, appendicitis must be ruled out in any pregnant women presenting with an episode of abdominal pain. The diagnosis of appendicitis in pregnancy is mainly clinical. Therefore, it requires high level of suspicion, skills and experience. Several investigations can assist in diagnosis. Early diagnosis and management must be made to avoid complications. Surgery remains the mainstay of treatment in acute appendicitis regardless of the choice of surgical techniques.

Fig.1 Uterus in situ

Fig.2 Perforated appendix.

References

[1]. Wijesuriya LI. Imaging as an aid to the diagnosis of acute appendicitis. Malaysian Fam Physician. 2007; 2:106-9.
[2]. Guttman R, Goldman RD, Koren G. Appendicitis during pregnancy. Can Fam Physician 2004; 50:355-7. 3. Anderson REB, Lambe M. Incidence of appendicitis during pregnancy. Int J Epidemiol 2001; 30: 1281-5.
[3]. Borst AR. Acute appendicitis: Pregnancy complicates this diagnosis. JAAPA 2007; 20:36-41.
[4]. Humes DJ, Simpson J. Acute appendicitis. Br Med J 2006; 333:530-4.
[5]. Stone K. Acute abdominal emergencies associated with pregnancy. Clin Obstet Gynecol 2002;45:553-61.
[6]. Butala P, Greenstein AJ, Sur MD, Mehta N, Sadot E, Divino CM. Surgical management of acute right lower-quadrant pain in pregnancy: a prospective cohort study. J Am Coll Surg 2010;211:490-4.
[7]. Coleman MT, Trianfo VA, Rund DA. Nonobstetric emergencies in pregnancy: trauma and surgical conditions. Am J Obstet Gynecol 1997;177:497-502.
[8]. Mourad J, Elliott JP, Erickson L, Lisboa L. Appendicitis in pregnancy: new information that contradicts long-held clinical beliefs. Am J Obstet Gynecol 2000;182:1027-9.
[9]. Terzi A, Yildiz F, Vural M, Coban S, Cece H, Kaya M. A case series of 46 appendectomies during pregnancy. Wien Klin Wochenschr 2010;122:686-90.

[10]. 11.Wallace CA, Petrov MS, Soybel DI, Ferzoco SJ, Ashley SW, Tavakkolizadeh A. Influence of imaging on the negative appendectomy rate in pregnancy. J Gastrointest Surg 2008;12:46-50.
[11]. 12.Kilpatrick CC, Orejuela FJ. Management of the acute abdomen in pregnancy: a review. Curr Opin Obstet Gynecol. 2008;20:534-9.

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