Antenatal corticosteroids in the septic antenate - to give or not to give?

Shukralla, HK
1 King Edward Memorial Hospital, Perth

Background

The benefit of a course of antenatal corticosteroids (ACS) in pregnant women at risk of preterm birth is well established.¹ Most women requiring corticosteroids tolerate the drug well with only transient side effects, but concern about the immunosuppressive action of steroid administration exists in the pregnant woman suffering systemic infection. Furthermore, a recent study has shown that in preterm infants from mothers with chorioamnionitis, exposure to ACS confers lower rates of neonatal death, compared to infants that did not receive ACS.²

37 year old G1P0 presented to King Edward Memorial Hospital (KEMH) at 29+4/40 with abdominal pain, vomiting and diarrhoea of 1 days duration. Uneventful pregnancy.

Examination findings:
• Febrile, tachycardic and hypotensive
• Right sided abdominal tenderness

Investigations:
• CRP 140, WCC 18.0
• Abdominal USS – NAD, appendix not visualised
• Obstetric USS - well grown baby with normal measurements

Diagnosis:
• Acute appendicitis

Management:
• Fasted, IV hydration and antiemetics
• Surgical review – broad spectrum IV antibiotics commenced
• Theatre after clinical deterioration – nifedipine prophylaxis given, ACS considered but not given

Surgical findings:
• Laparotomy revealed acute necrotising purulent ruptured appendix with purulent peritonitis

Outcome:
• Recovered well post operatively – 3.5kg baby born at term via spontaneous vaginal delivery

Discussion

KEMH guidelines state that ACS are contraindicated in systemic infection, whereas the Royal College of Obstetricians and Gynaecologists (RCOG) recommend exercising caution with their use in maternal infection.³ However RCOG have concluded that “there is no evidence to suggest a single course of ACS would have a profound effect on women with systemic infection”.³

The American college of Obstetricians and Gynecologists (ACOG) recommend the use of ACS, even in the setting of maternal sepsis.

New research suggesting that preterm infants of septic mothers have lower rates of neonatal death,² may prompt physicians to be more aggressive in their use of ACS, even in the setting of maternal sepsis.

References