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Infective Endocarditis During Pregnancy
IE during pregnancy is a very rare incidence, almost around 0.006% of pregnancies.

Current literature data consists of sporadic case reports.

Cardiac diseases are major challenge during pregnancy, IE make even much more worse.

Maternal mortality approaches 33% while fetal mortality is around 29%.

Risk Factors and potential causative organisms

• Most affected patients are those with predisposed cardiac lesions then the IVDU.

• Unfortunately, lately noticed is IV iron preparation as a major risk factor.

• Increased incidence of UTI in pregnancy.
As other IE, *Streptococcus veridans* is the commonest causative organisms in published data.

However with increasing incidence of IV line as a source of during pregnancy, *S. aureus* is increasing.

In BCN cases empirical ttt should cover; *Enterococcus sp.*, *group B streptococci*, *Gm-ve Bacilli*.

That would consist of dual beta lactam ring abx and an aminoglycoside.

How to Manage?

- Pregnant ladies with IE need meticulous care, support and close observation to the mother and her fetus.
- Team work including an obstetrician is mandatory.
- Most deaths result from HF then emboli.
- Despite high Fetal mortality, urgent surgery should performed without delay when indicated.
Heart Failure

• The most important indication for urgent and emergency surgery
• Detecting HF during pregnancy is very difficult owing to the physiologic hemodynamic changes
• Increased HR, LL oedema and dyspnea are common during pregnancy yet they should not be accepted beyond appropriate levels
• Regular TTE assessment is a must to detect any subtle HF

Antibiotic Choice

• Patient should be treated the same way as non-pregnant patient
• Fetotoxicity should be taken in consideration however it should not jeopardize efficacy of ttt
• Penicillins, Erythromicin, Cephalosporins are FDA class B and could be given through 3 trimesters
• Vancomycin, Imipenem, Rifampicin, and Teicoplanin are C; risk can’t be excluded and risk–benefit must be carefully considered
• Aminoglycosides, Quinolones, and Tetracyclines are FDA group D, which means definite fetal hazard during 3 trimesters

• They should be given only with definite indication

• In general role of aminoglycosides had much declined

• They are only indicated if:
  – Culture based with no alternative option
  – In PVE caused by OSSA, MRSA
  – BCN endocarditis

• For BCN cases a combination therapy is needed

• A total duration of 6 wk is needed since 1st day of response

• Treatment would consist of
  - Ampicillin sulbactam 3gm/6hr
  - Gentamicin (3-5 d for vative valve and 2 wk for PVE)
  - Ceftriaxone 2gm/12 hr
  - Vancomycin should be considered with history of IV lines or drugs
Surgical Intervention

• Surgery should be reserved for definitely indicated cases

• However when indicated, it should be carried out without unnecessary delay

• Whenever possible a viable baby should be delivered

Thank You