CLINICAL PRACTICE GUIDELINE

Infections (obstetrics and gynaecological): Antibiotic prophylaxis for caesarean section

This document should be read in conjunction with this Disclaimer

Background

Evidence supports administration of antibiotic prophylaxis prior to skin incision for caesarean section (both elective and non-elective) for prevention of wound infection and endometritis.[1]

Studies show that administering antibiotic prophylaxis prior to skin incision compared to after cord clamping significantly reduces the incidence of maternal infection.[2,3,4]

Indications

- All patients giving birth by caesarean section.
- Surgical prophylaxis should still be administered even if the patient is receiving antibiotics for prolonged rupture of membranes or group B streptococcus prophylaxis.[1]

Antibiotic regimen

- Commence 60 minutes, ideally 15-30 minutes, before skin incision.
- Cefazolin 2g IV given as an infusion,
  - For women with BMI>40 the obstetrician may elect to increase the cefazolin dose to 3g. This is a discretionary decision as there is presently insufficient evidence to recommend this practice routinely[5,6,7.]
  - Refer to the WNHS Cefazolin Adult Medication Monograph for further information

- For patients with **immediate** penicillin hypersensitivity use:
  - Clindamycin 600mg IV given as an infusion, before skin incision (must be given as infusion over 20 minutes
  - Refer to the WNHS Clindamycin Adult Medication Monograph for further information

Colonisation or infection with methicillin resistant *s. Aureus* (MRSA) - micro alert b or c

- Offer decolonisation therapy as per the WNHS Micro Alerts and Multi-Resistant Organisms Policy
- At the time of caesarean section, ADD vancomycin to a max dose of 1.5g. Administration of both cefazolin and vancomycin is recommended unless cefazolin is contraindicated.
- Prescribe at the recommended rate of no greater than 10 mg/min, ideally timed to complete the infusion before surgical incision but may be commenced up to 30 minutes before the procedure, as per eTG.[8] Recommended prophylaxis doses of vancomycin are:[8,9]
  - ≤50 kg vancomycin dose = 15 mg/kg IV
  - 50-75 kg vancomycin dose= 1g IV
  - ≥ 75kg vancomycin dose= of 1.5 g, IV
- Refer to the WNHS Vancomycin Adult Medication Monograph for further information

Prevention of surgical site infection policy

For advice regarding general measures to prevent surgical site infection including skin preparation, refer to the WNHS IPM: Prevention of Surgical Site Infections Guideline.

References

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9. Western Australian Therapeutic Advisory Group. Surgical Antibiotic Prophylaxis Guideline: Adult. http://www.watag.org.au/watag/docs/Surgical_Antibiotic_Prophylaxis_Guideline.pdf

Related WNHS policies, procedures and guidelines

WNHS Clinical guidelines:

- Infection Prevention and Management: Prevention of Surgical Site Infections; Micro Alerts And Multi-Resistant Organisms
- Obstetrics & Gynaecology: Infections (Obstetrics & Gynaecology):
  - Prophylaxis: Gynaecological Urogynaecological Surgery;
  - Antibiotic Treatment: Endocervical infections; HSG for Infertility; Treatment for UTI; Treatment for Vaginal Infections
- Pharmacy: Adult Medication Monographs: Clindamycin ; Vancomycin ;

Useful resources (including related forms)

Antimicrobial Stewardship Healthpoint hub page

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