



Judicious use of antimicrobial agents

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Outlines



- Case scenario
- Systemic antifungal agents
- Recommendation for treatment/prevention of invasive candidiasis/candidemia in
 - Neonates
 - Non-neutropenic patients AND critically-ill patients
 - Neutropenic patients



Case scenario



- A male-infant born at **GA 28⁺⁴ weeks** by vaginal delivery due to premature rupture of membrane
- His weight was **970 grams** with Apgar score of 5 and 7 at 1 and 5 minutes, respectively
- The parturient is 25 year-old woman with normal history of prenatal examination
- Ampicillin and gentamicin were given and discontinued after negative blood culture



Case scenario



- He was on ETT and mechanical ventilation for RDS for 7 days
- NP-CPAP was put on after extubation
- He was fed by NG tube and was thriving well
- At the age of 14 days, he developed abdominal distension and feeding intolerance
- X-ray showed marked abdominal distension with pneumoperitoneum
- He went into respiratory failure and required mechanical ventilation
- Subsequently, **necrotizing enterocolitis** was confirmed



Case scenario



- **Emergency operation** was carried and a 40 cm necrotic small intestine was removed
- **Meropenem** 20 mg/kg/dose q 8 h IV was started and **TPN** was given via peripheral inserted **central catheter** (PICC)
- He was extubated and put on NP-CPAP 7 days later
- All cultures were negative, however, **meropenem was continued**
- At DOL of 30, he developed **temperature instability**