Puerperium

Period following delivery of the baby and placenta to approximately 6 weeks postpartum.

- Involution of the Uterus
- Lochia (lochia rubra, lochia serosa, lochia alba)
- Increase in peripheral vascular resistance
- Marked weight loss

Psychosocial Changes

- Postpartum blues
- Postpartum depression
- Postpartum psychosis
- Edinburgh Postnatal Depression Scale.

- 40-80% of all postpartum
- Mild mood swing
- Peaks day 5-14
- Support and encouraging adequate rest
Endometritis complicates about 1% of vaginal and about 5–27% of cesarean deliveries.

Epidemiology/incidence

Symptoms and signs are described in Table 26.1, plus abdominal tenderness, fever ≥100.4°F, at least twice, ≥6 hours apart; fundal tenderness; tachycardia (heart rate >100 beats/min); and foul-smelling lochia. Endometrial cultures are usually not necessary.

Diagnosis/definition

Diagnosis is based on clinical criteria. Table 26.1 shows diagnostic criteria.

Risk factors

Risk factors for postpartum endometritis include:
- Cesarean delivery (directly correlated to its duration)
- Labor (directly correlated to its duration)
- Rupture of membranes (directly correlated to its duration)
- Socioeconomic status
- Number of vaginal examinations
- Internal fetal monitoring
- Manual extraction of placenta
- Episiotomy
- Forceps delivery
- Young age (<17 years old)³
- Obesity (BMI > 30)⁴
- Operative time
- Blood loss²
- Bacterial vaginosis⁴
- GBS colonization⁹,10
- Diabetes²

Once uncomplicated endometritis has clinically improved with intravenous therapy (usually 24–48 hours), oral therapy is not needed. Gentamicin and clindamycin are often used.

Postpartum endometritis

1% of vaginal deliveries
5–27% of cesarean deliveries.
Ascending infection from vagina
Polymicrobial

≥ 2 of the following:
- Fever >100.3°F, at least twice, ≥6 hours apart
- Fundal tenderness
- Tachycardia (heart rate > 100 beats/min)
- Foul-smelling lochia

Symptoms/signs

The diagnosis is based on clinical criteria. Table 26.1 shows diagnostic criteria.

Management

The lower incidence in certain settings, such as diabetic patients, the risk might be higher.

The infection is usually polymicrobial, as in the vast majority of cases more than 94% of microabscesses that trigger the invasion of inflammatory cells, which release chemical mediators responsible for the action actually develop the different manifestations of endometritis.

Prevention

The use of prophylactic antibiotics has impacted the occurrence of such complications dramatically. Although no trials are available to assess their efficacy, elevation of temperature may be the only sign found in patients with postpartum endometritis and/or fever. In particular, both ampicillin and cefazolin have been shown to be effective by once-daily dosing, preferably 6 hours apart; fundal tenderness; tachycardia (heart rate >100 beats/min); and foul-smelling lochia.

Postpartum endometritis

Postpartum depression

Depression with onset within 12 months of delivery, 10% of women
Social adverse effects
Pharmacotherapy

Postpartum infections

Wound infection

Postpartum endometritis

Risk factors
Workup & management

❖ Endometrial culture
❖ Blood culture
❖ Urine culture
❖ CBC
❖ Parenteral, broad-spectrum antibiotics
❖ Gentamicin and Clindamycin
❖ Follow up cultures
❖ Monitor Temperature

Persistant fever

❖ Pelvic abscess
❖ Wound infection
❖ Pelvic septic thrombophlebitis
❖ Inadequate antibiotic coverage
❖ Retained placental tissues
❖ Resistant organism
❖ Non-genital source of infection

Wound infection

❖ Surgical site infection (SSI)
  ✓ Superficial: skin and subcutaneous tissue only
  ✓ Deep: deep soft tissues
  ✓ Organ/space
### Wound infection

- 3-4% of cesarean deliveries
- Common microorganisms
  - **Staphylococcus epidermidis**
  - **Enterococcus faecalis**
  - **Staphylococcus aureus**
  - **Escherichia coli**
  - **Proteus mirabilis**

### Risk factors

- Preoperative remote infection
- Chorioamnionitis
- Diabetes
- preeclampsia
- High BMI
- Nulliparity
- Increased surgical blood loss

### Workup & management

- History
- wound examination
- Wound culture
- Radiological studies: US, CT scan
- Antibiotics
- Surgical wound debridement
  - Primary closure
  - Secondary closure

### Questions?