Overview

Endometritis refers to the inflammation of the endometrial lining of the uterus. It can be further classified into acute or chronic based on pathologic findings. The cause of an acute endometritis is almost always infectious. Non-pregnancy-related acute endometritis occurs in the context of pelvic inflammatory disease either secondary to sexually transmitted infections or gynecologic procedures, whereas pregnancy-related acute endometritis can occur through direct contamination of the uterine cavity from indigenous cervico-vaginal flora during labor and delivery or through infected retained products of conception. Chronic non-obstetric endometritis has a number of causes, one third of the cases are idiopathic.

Acute Postpartum Endometritis usually develops on the second or third postpartum day.

- Pathogenesis: infection of the uterine cavity from ascending cervico-vaginal flora during labor and delivery; C/S increases the risk by 10 – fold
- Risk factors: prolonged labor (>12h), PROM (>24 h), intra-partum amnionitis, maternal age <17 years, anemia after delivery, manual placental removal, bacterial vaginosis during pregnancy, operative vaginal delivery, C/S, obesity, poor nutrition

Acute PID-related Endometritis

- PID refers to acute infection of the upper genital tract resulting from ascending infection of the lower genital tract. Endometritis can either exist alone or more commonly coexist with salpingitis and oophoritis. It can be caused by STIs or transcervical gynecologic procedures such as hysteroscopy, IUD insertion and endometrial biopsy
- The diagnostic criteria and treatment of PID-related endometritis are the same as for PID

Chronic Endometritis

- Rare
- Causes include infection, intrauterine foreign bodies (i.e. IUD) or growths (i.e. submucosal polyps), radiation, retained products or idiopathic
- TB Endometritis is rare, but highly prevalent in women from Nepal and North India; infertility is the chief presenting symptom

Diagnostic Considerations

Clinical manifestation

Acute:
- Fever (note that low grade fever in puerperium can be present as it is a period of high metabolic activity, but it rarely exceeds 37.2 °C)
- Abdominal pain
- Purulent vaginal discharge
- Abnormal uterine bleeding
- Uterine tenderness or cervical motion tenderness on exam

Chronic:
- Symptoms are often absent and physical examination normal
- Abnormal uterine bleeding can be the only presenting symptom, as such, doing an endometrial biopsy can be helpful as it can rule out endometrial hyperplasia and carcinoma, and provide the diagnosis of chronic endometritis based on histological findings

Differential Diagnosis

- UTI
- Appendicitis
- Pyelonephritis
- Pelvic thrombophlebitis
- Chorioamnionitis

Diagnosis

The diagnosis of endometritis is generally made clinically, however the gold standard diagnosis is based on endometrial biopsy. Other investigations may include: CBC, endocervical cultures for chlamydia and gonorrhea, urine culture to rule out UTI. Endometrial cultures are NOT routinely performed as it is often contaminated. It can be considered in cases of initial treatment failure.

Imaging

- Ultrasound: rule out retained products of conception, ovarian mass, intrauterine hematoma, etc.
- CT: rule out other causes of pelvic pain, and/or assess complications of endometritis that include septic pelvic thrombophlebitis, ovarian vein thrombosis and phlegmon, tubo-ovarian abscess
**Endometritis**

Endometritis refers to inflammation of the endometrial layer of the uterus. It is commonly caused by infection of different etiologies. Postpartum endometritis is a common cause of postpartum fever. Endometritis can also exist alone in the context of pelvic inflammatory disease. Chronic endometritis has many different etiologies including infections, inflammation from radiation therapy, intra-uterine devices and growth, and idiopathic causes. In addition to removing triggering agents, broad-spectrum antibiotic is the mainstay of therapy.

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### References

References can be found online at [http://www.dfcm.utoronto.ca/programs/postgraduateprograme/One_Pager_Project_REFERENCES.htm](http://www.dfcm.utoronto.ca/programs/postgraduateprograme/One_Pager_Project_REFERENCES.htm)