AAST Acute Care Surgery Didactic Curriculum

Surgery in Immunocompromised Patients

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Immunocompromised patients

Highlights:

- Neutropenic enteritis and typhlitis are associated with a high mortality rate that increase with delay in diagnosis. Diagnosis requires a high index of suspicion; imaging findings include bowel wall thickening of the right colon on CT scan. Treatment is mainly supportive including broad spectrum antibiotics and bowel rest. Operative intervention is indicated in patients with clinical signs and symptoms consistent with ischemia.
- CMV colitis is associated with a high mortality if it goes unrecognized. The gold standard for diagnosis is CMV-specific immunohistochemistry of tissue biopsies (obtained via colonoscopy). Treatment consists of antiviral therapy, antibiotics and bowel rest.
- The treatment of C difficile colitis has evolved significantly. Maximal medical therapy should be exhausted. However, for patients with fulminant colitis, operative intervention may be required. The standard of care includes subtotal colectomy and end ileostomy. There is some data to support diverting loop ileostomy and colonic lavage, however this is not standard yet as further long-term data is required.
- If operative intervention is undertaken in neutropenic enteritis, CMV colitis or C diff colitis, the physiologic derangements and clinical situation frequently demand a damage control sequence.

Transplanted patients

Highlights:

- In the first 30 days following transplantation, transplanted patients are at risk for nosocomial infections
- In one to six months following transplantation, immunosuppression increases and patients are at the HIGHEST risk for opportunistic infections.
- At greater than six months after transplantation, the risk of opportunistic infection diminishes except in patients with more aggressive anti-rejection medications regimens.

HIV/AIDS Patients

Highlights:

- Patients with HIV infection should be evaluated and managed similarly to those without HIV infection
- CD4 count and viral load should always be obtained. A low CD4 count and high viral load are associated with a higher risk of complications.
- Anti-viral therapy should be continued perioperatively if at all possible.

Patients on steroids

- For patients on chronic steroids, they should continue on their regular regimen; however, surgeons should be aware of the increased risk of complications.
- Patients on chronic steroids may exhibit signs of adrenal insufficiency perioperatively and require a “stress dose” of steroids (typically 100mg hydrocortisone).