Emerging Clostridial Disease Workshop

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CLOSTRIDIUM DIFFICILE **TESTING**

1. **Need for a test that is rapid, sensitive, specific and inexpensive**
2. **Test for NAP1**
3. **Utility of titers or "test-of-cure"**

CLOSTRIDIUM DIFFICILE EPIDEMIOLOGY

1. Should it be reportable?
2. Sentinel reporting – antibiotics, complications, strains, cost, age
3. Risk factors other than antibiotics (PPIs etc)

CLOSTRIDIUM DIFFICILE TREATMENT

1. **Initial treatment**
   - **Seriously ill (ileus etc)**
   - **Improved outcome -- ↓ cost, recurrences, resistant bacteria**
2. **Recurrent disease: Abx, IVIG, probiotics, fecal implant, toxin binders**

CLOSTRIDIUM DIFFICILE **PATHOPHYSIOLOGY**

1. **Role of immune response**
2. **Role of colonic flora**
3. **Mechanism of toxins**

CLOSTRIDIUM DIFFICILE PREVENTION

1. Infection control
   - Standard practice – "hands and walls"
   - BioQuell
2. Antibiotic control – what work works
3. Active & passive immunization

CLOSTRIDIUM SORDELLII

Is there a practical test?

- **Culture**
- **Toxin assay or other non-culture based**

CLOSTRIDIUM SORDELLI EPIDEMIOLOGY

1. Associations: abortions, childbirth etc.
2. Should it be reportable?
3. Are there patient defined risks?

CLOSTRIDIUM SORDELLII: MANAGEMENT

1. Antibiotic options – betalactams vs. toxin-inhibition
2. Role of antitoxin
3. Adjunctive measures

CLOSTRIDIUM SORDELLII PATHOPHYSIOLOGY

1. Role of vaginal flora
2. Role of immune and endocrine responses
3. Role of products including mifepristone and its 6 metabolites
4. Molecular pathophysiology
5. Source of pathogen

CLOSTRIDIUM SORDELLII PREVENTION

Infection control

Risk reduction – patient issues

Prophylactic antibiotics

Are there common areas of research: toxins are antigenically related?

1. Mechanism of toxin(s)
2. Test for toxin detection
3. Role of normal flora
4. Therapeutic implications – role of antitoxin & antibiotics
5. Microbiology – physiology, sporulation/germination, microbial genetics