CASE 11: NOCARDIOSIS

- *Nocardia* spp: gram-positive, aerobic, branching, filamentous bacilli, weakly acid-fast, belong to the order Actinomycetales

- In 85% of cases the causative organism is *Nocardia asteroidis*

- The remaining 15% are caused by *N. brasiliensis* and *N. otitidiscaviarum*

- Nocardia species inhabit the soil and have worldwide distribution
NOCARDIOSIS

• Fever, weight loss, night sweats and cough

• Normal hosts can be affected but more common in the immunocompromised patient

• Infection tends to be localized in the normal host. Immune compromise predisposes to invasive disease

• Lung invasion can cause bronchopneumonia and/or lobar pneumonia
Prognosis and Treatment

• Direct extension to the pleura, trachea, heart and extension to the brain or skin through the circulation are recognized complications and carry grave prognosis

• Prolonged treatment with sulfonamides
Case 12

• 10 day old female with failure to pass stools
• Exploratory laparotomy performed and appendix sent for frozen section
Rectum
Rectosigmoid
Splenic flexure
Cecum
Terminal ileum
Total colonic Hirschsprung disease

- Total colonic aganglionosis
- Severe form of HD
- 2-13% (less than 10%)
- M:F 4:1
- Heterogenous disorder
- Variable severity and incomplete penetrance
- Variable pattern of inheritance
- More often autosomal recessive
- RET and EDNRB alterations in 30-50%

- M:F 1:1 or 0.8:1
- Presents in neonatal period or later (milder than expected)
- Other pathophysiologic mechanisms in addition to congenital
- Associated mainly with RET
- More common in familial series
- Radiology inconsistent
Case 1 (from FS workshop SPP)

• One month old male with Hirschsprung’s disease diagnosed clinically and on suction rectal biopsy, now undergoing endorectal pull through
FS colonic wall
Frozen sections reported as:

1. DISTAL COLON: Muscular wall with ganglion cells present
2. PROXIMAL COLON: Colonic mucosa and muscular wall. No ganglion cells identified

• What is wrong with this report?
Pathologist:

• Mislabeled specimen?

• The surgeon sends another biopsy for frozen section which is reported as follows:

PROXIMAL COLON: Colonic mucosa and muscular wall with ganglion cells present

Permanent sections are signed out the same way