Feline Infectious Peritonitis (FIP)

Presentation:
- **Young** cats, post-weaning - 6 mos - 2 yrs age
- MALES >> Females
- **Multi-cat** environments - CATTERIES, shelters
- **Dx** most often based on
  - Clinical signs (ascites, malaise, dyspnea, weak)
  - Characteristics of effusion fluid
  - LACK of other disease dx
  - Esp. in a young, male cat

Test(s) of choice:
- **Hyperglobulinemia** w/ low albumin/globulin ratio (0.9) – a hallmark of FIP
- **Analysis of effusion(s)** - Nonseptic exudate – **high protein, low cells**
  - Clear, straw-colored, viscous, fibrin strands
  - **Protein > 3.5mg/dL**. Low total cell count (< 2000/mcL)
  - Globulin conc > 32% strongly suggests FIP
  - **Rivalta screening test** Positive=drop of effusion maintains shape and sinks slowly
- **FCoV serology**: Positive titer=exposure to FCoV; most + cats DO NOT develop FIP
  - Titors > 1:16,000 - suggestive of FIP if C/S present
- **CSF analysis**: High protein > 20 mg/dL, >5 cells/uL - mononuclear pleocytosis w/ neuts
- **α1 Acid glycoprotein**: Acute phase prot; Plasma or effusion > 1500 ug/dL suggests FIP
- **DEFINITIVE DIAGNOSIS**: Biopsy w/ immunohistochemistry
  - Pyogranulomatous inflammation w/ vasculitis, viral particles in macrophages

Rx of choice: Supportive/palliative care. If quality of life is poor - Euthanasia

Prognosis: Grave, Dry form: 1 yr survival Wet form: survive days to 2 mos post Dx

Pearls: Feline enteric coronavirus (FCoV) is **vulnerable to mutation**
- FCoV spontaneously mutates into FIP virus
- FIP virus replicates w/in macrophages & regional lymph nodes, UNlike FCoV
- **Outcome of infection varies** w/ pathogenicity of mutant virus & immune response

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**Classic Question(s)**

What is a typical presentation of a cat with feline infectious peritonitis?

Describe what results would support of a diagnosis of FIP for each of these tests:
---Globulin and albumin?  Analysis of effusion?  FCoV serology?
---Rivalta test?  α1 Acid glycoprotein (AGP)?  Biopsy?

Name 4 husbandry and hygienic measures that a shelter can take to prevent/control FIP.

What is the pathophysiologic mechanism by which FIP is thought to develop in cats?