Pregnancy Failure of the Dog and Cat

The general principles of identifying failure of pregnancy in this species is exactly the same as other mammals – FOP lecture 1

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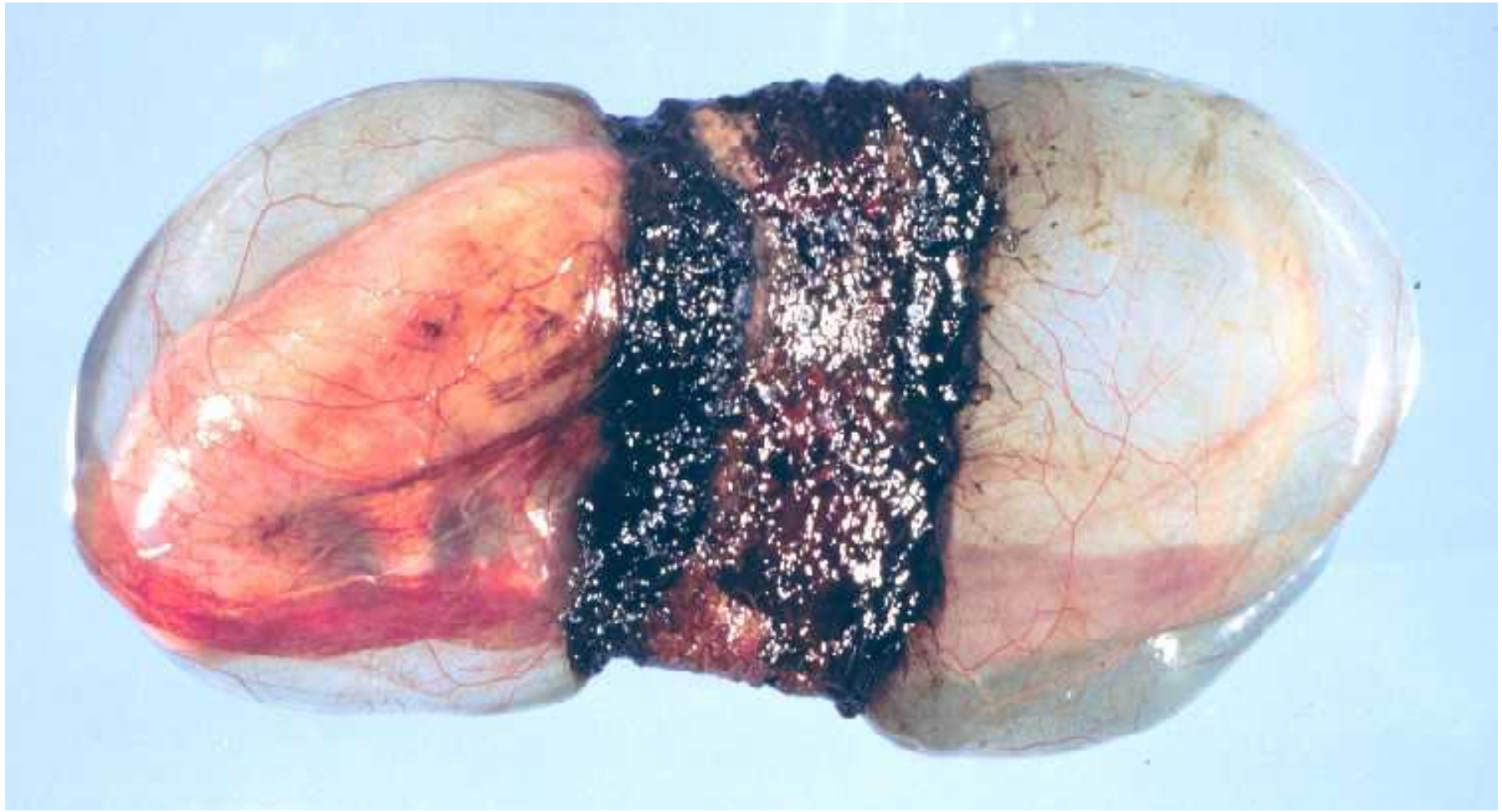
General Approach to Failure of Pregnancy

- Preliminary discussions
  - Is there a public health issue?
  - **Is there really a problem?**
  - Cost benefit analysis
  - Discuss Isolation

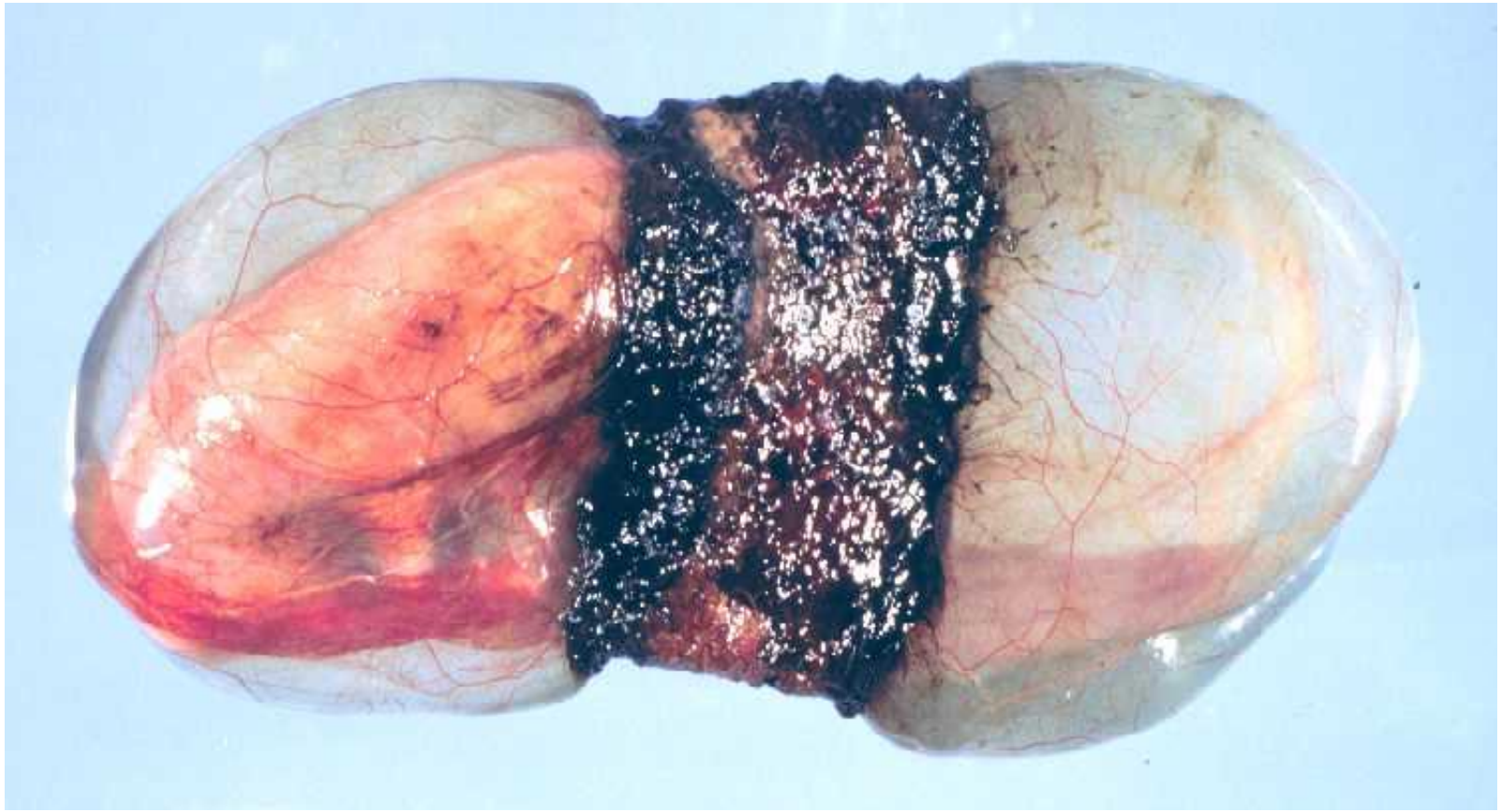
- Clinical Investigation of FOP
  - Clinical history and interview
  - Take precautions to prevent zoonotic disease
  - **Determine common diseases**
  - **Examine Mother, Fetus and Placenta**
  - **Diagnostic testing**
  - Final diagnosis
  - Treatment or recommendations.

Canine conceptus



Dogs and Cats

- Zonary placenta
  - sampling



What you can expect with investigating FOP in Dogs

- Up to 20% mortality
- 103 puppies from 24 dogs
  - 3 stillborn
  - 11 died within 48 hrs
- 27,221 female dogs
  - Abortion – 6.8%
  - Stillbirth – 7.4%

What you can expect with investigating FOP in cats

- Litter size 4.6
- Birth weight 93.5g
- Stillbirth 7.2%
- Perinatal mortality 9.1% (to 8 weeks)

Sparkes AH, Rogers K, Henley WE, Gunn-Moore DA, May JM, Gruffydd-Jones TJ, Bessant C. A questionnaire-based study of gestation, parturition and neonatal mortality in pedigree breeding cats in the UK. J Fel Med Surg 2006; 8: 145-157

Public health issue - zoonotic disease

- List of zoonotic agents for dogs and cats is the same as for all species (FOP general lecture).

- Pregnant cats subclinically carry *Coxiella burnetii.*
  - Poker players pneumonia
  - Caesarian section vet clinic - morbidity.

Reported causes of FOP in dogs

- Bacteria
  - *Brucella canis*
  - *Streptococcus* spp
  - *Salmonella*
  - *Campylobacter*
  - *Mycoplasma/Ureaplasma*
- Viruses
  - *Varicellovirus canidalpha1* (canine herpesvirus 1 CaHV-1)
  - *Morbillivirus canis* (canine distemper virus)
  - *Canine mastadenovirus A* (canine hepatitis virus)
- Protozoa
  - *Toxoplasma gondii*
  - *Neospora caninum*
- Endocrine
  - *Progesterone deficiency (hypoluteism)*
  - *Hypothyroidism*

Focus on *Varicellovirus canidalpha1*

- Neonates to 4 wks
- Temperature 32^0C

Reported causes in cats

- *Varicellovirus felidalpha1* (feline herpesvirus 1; FeHV1)
- *Vesivirus - Feline calicivirus*
- *Lentivirus - Feline immunodeficiency virus*
- *Gammaretrovirus - Feline leukemia virus*
- *Salmonella*

- Always consider *Coxiella burnetii*.