

Multicentric Neoplasia in a King Snake

Steve Rushton, DVM, DACVP

Jennifer Haugland, DVM

North Carolina Veterinary Diagnostic Laboratory
Raleigh, North Carolina

History and Signalment

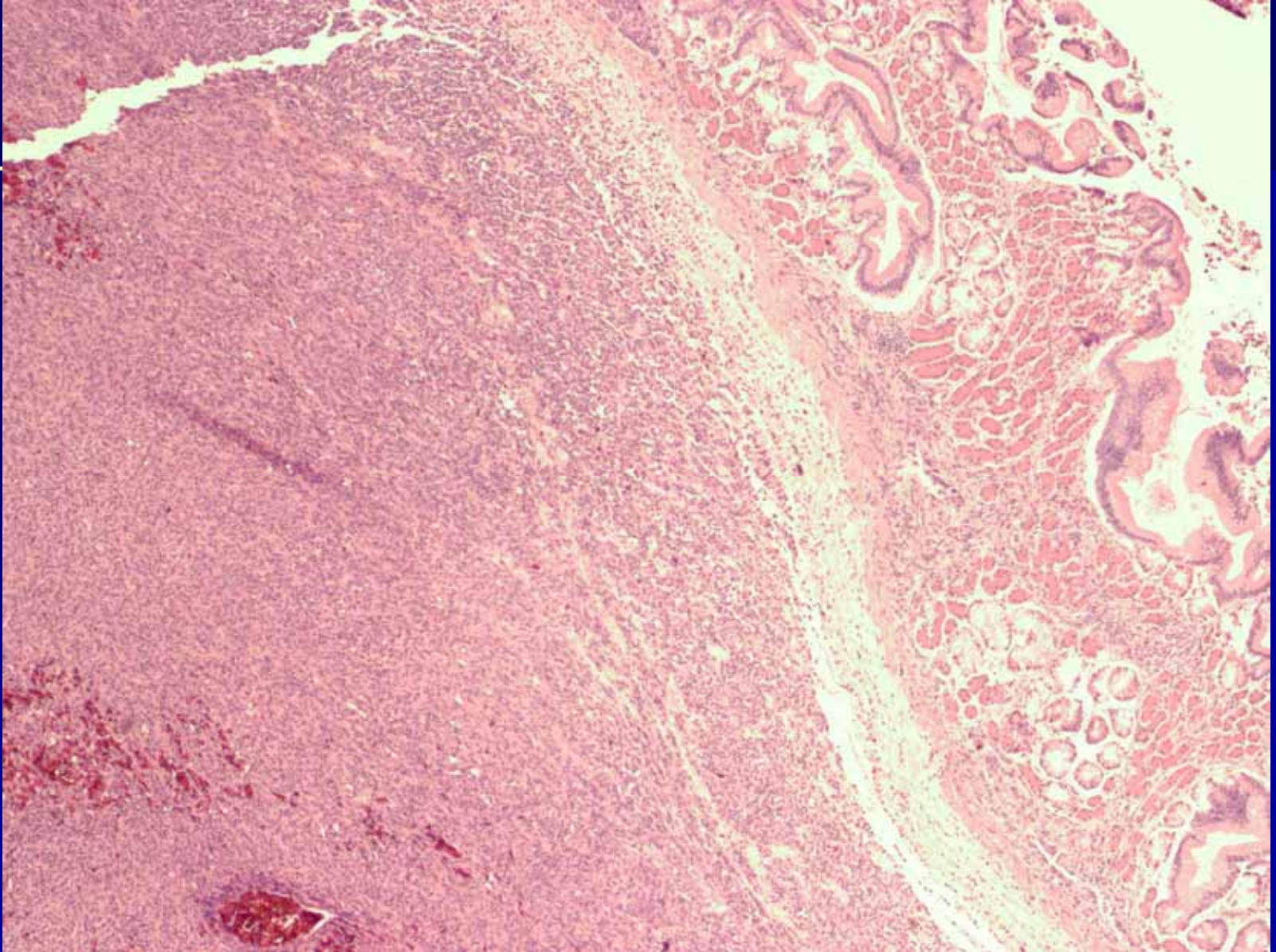
- 9 yr. old Eastern King Snake
- Distal coelomic mass palpated
- Needle aspirate non-diagnostic
- Found dead in exhibit cage

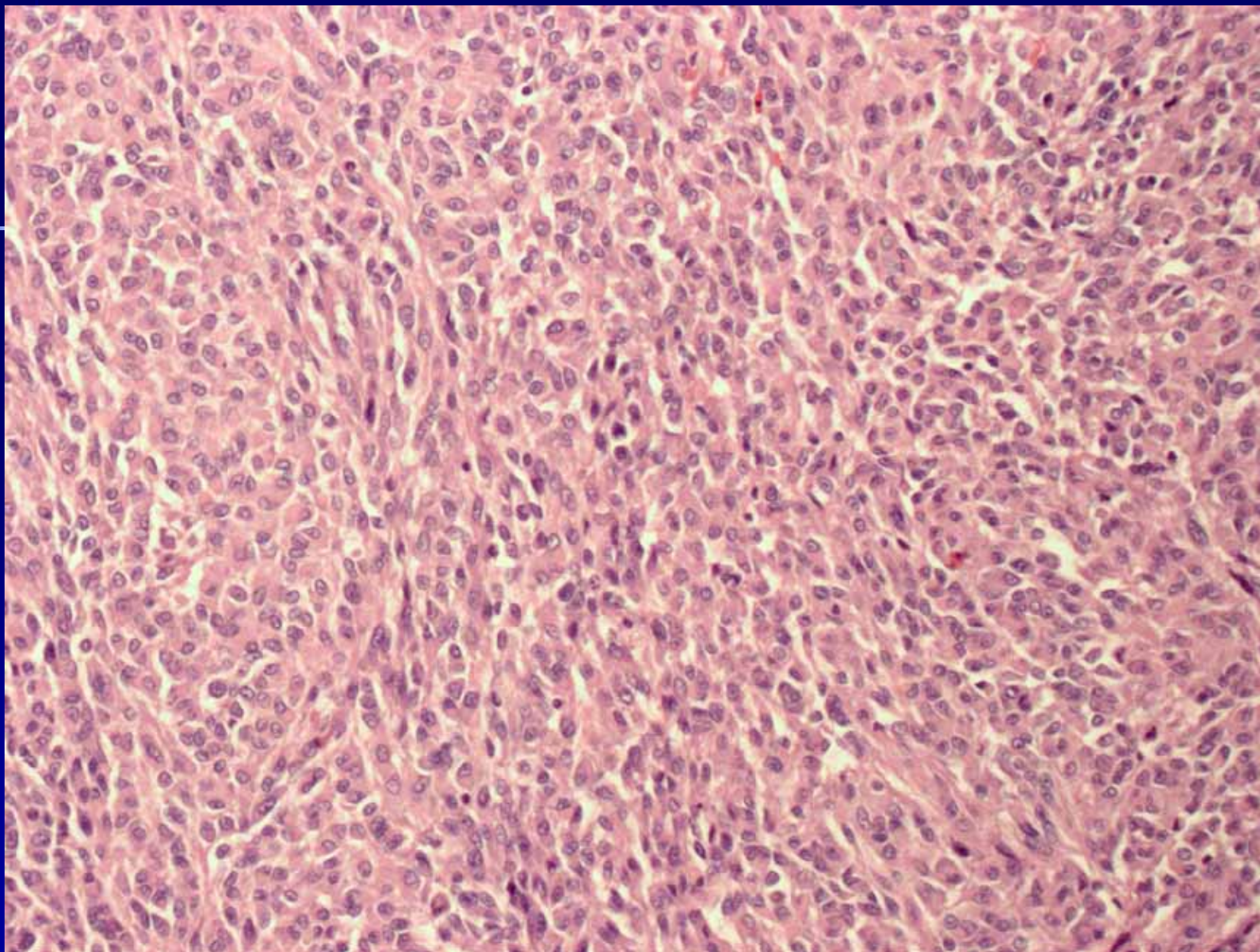


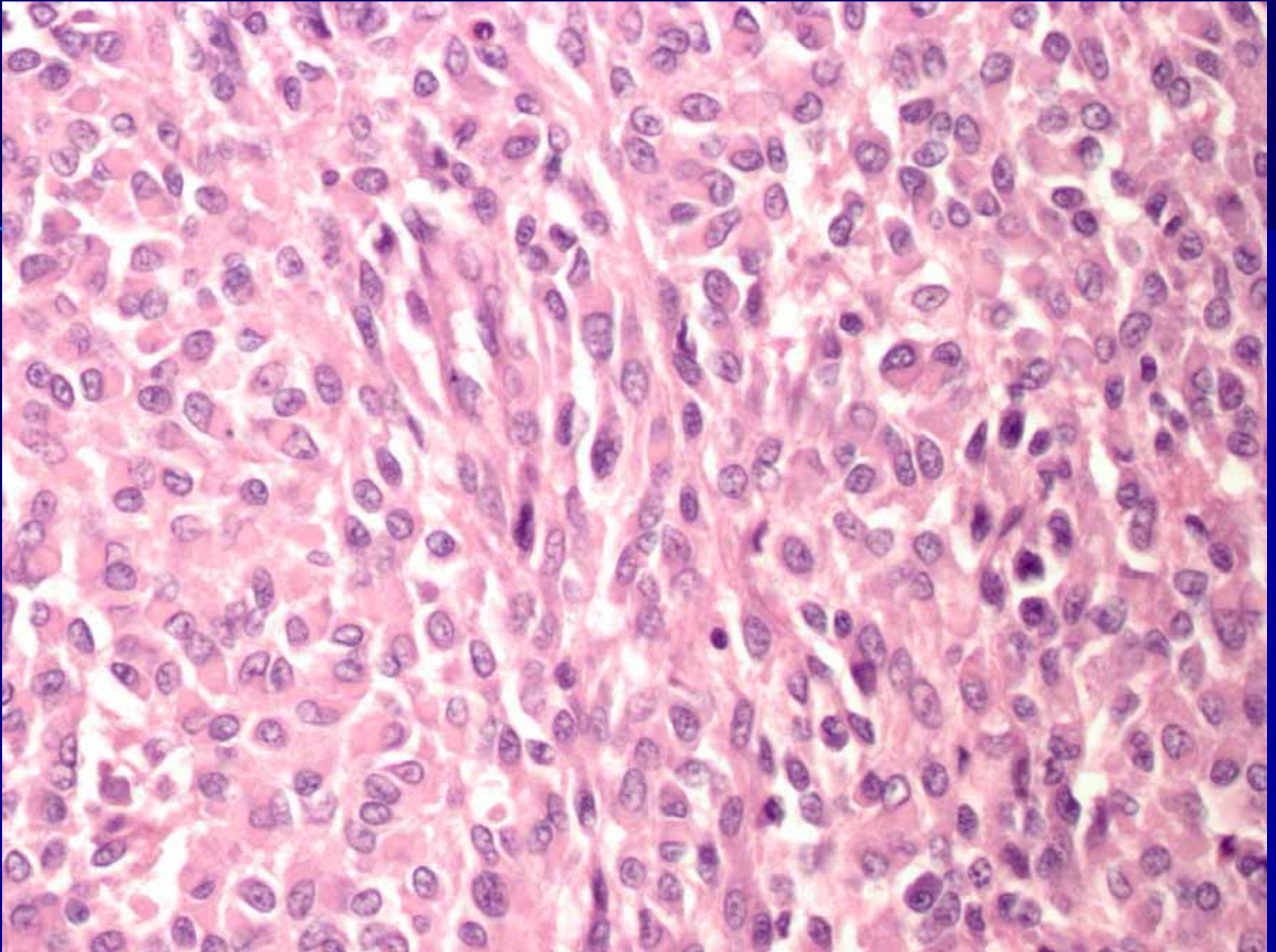
Gross Examination

- 6x5cm tan, transmural mass in stomach
- Multiple 3-8mm diameter similar masses in liver
- 2x1cm tan mass in pancreatic region

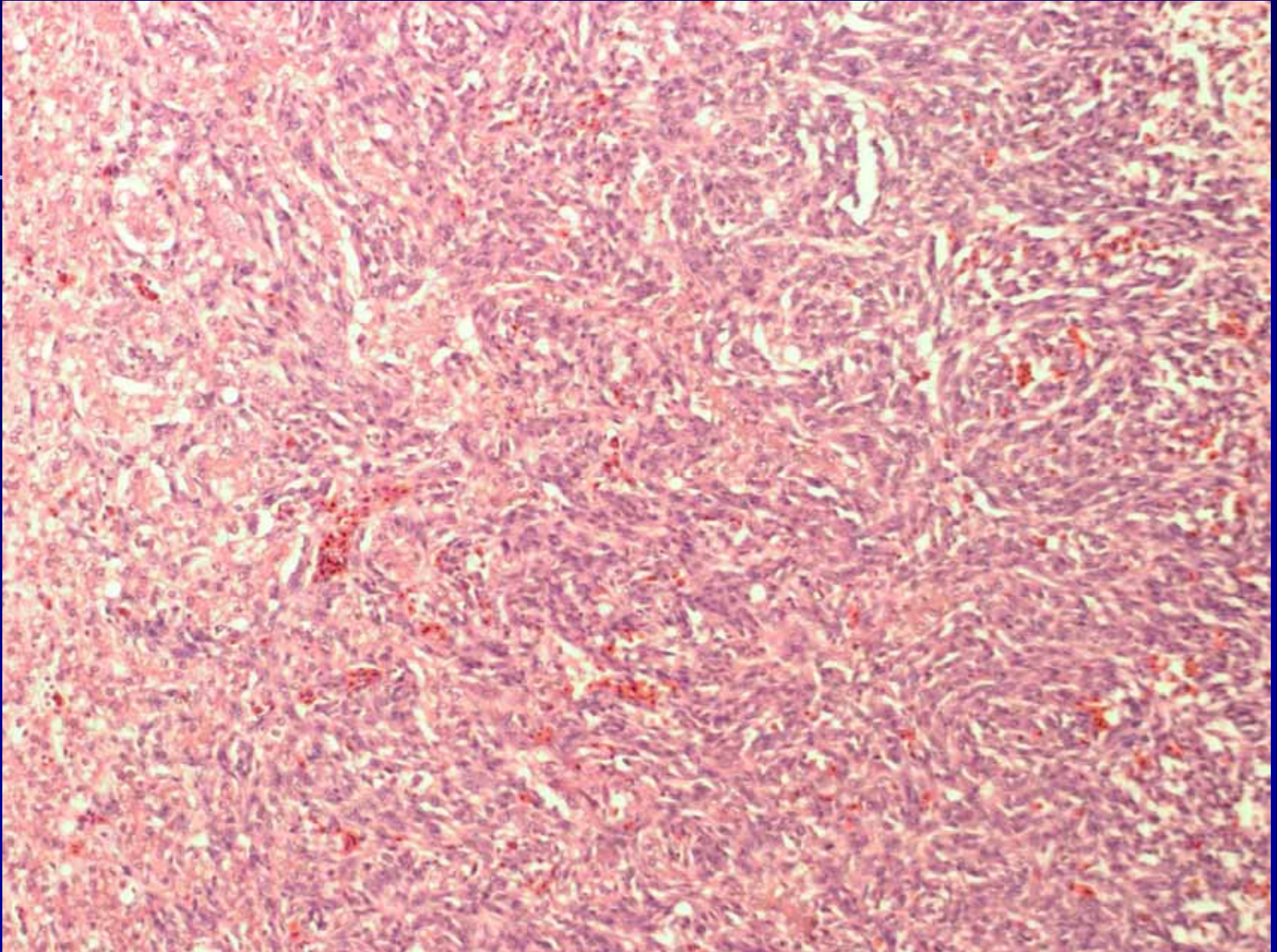
Stomach

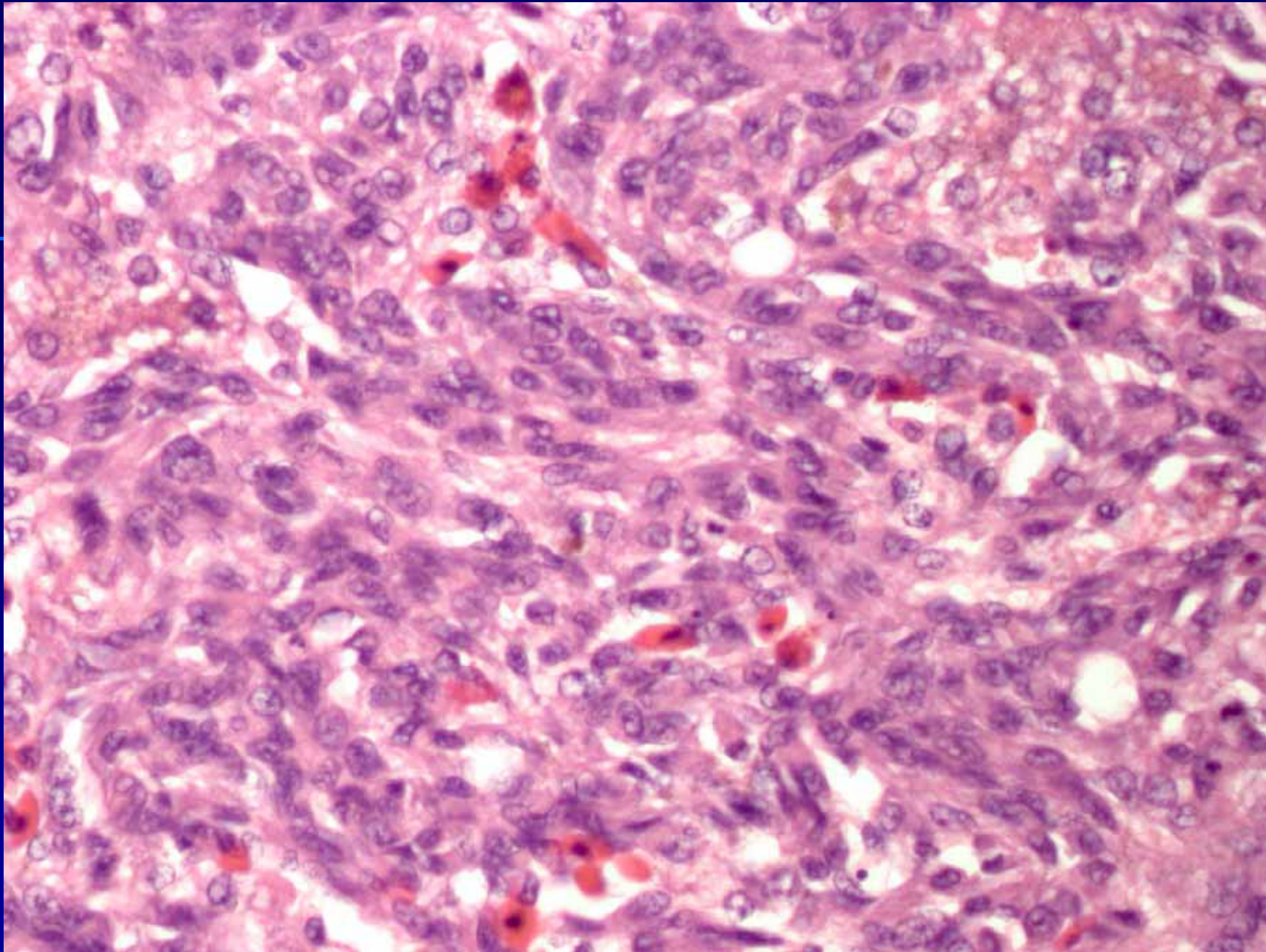




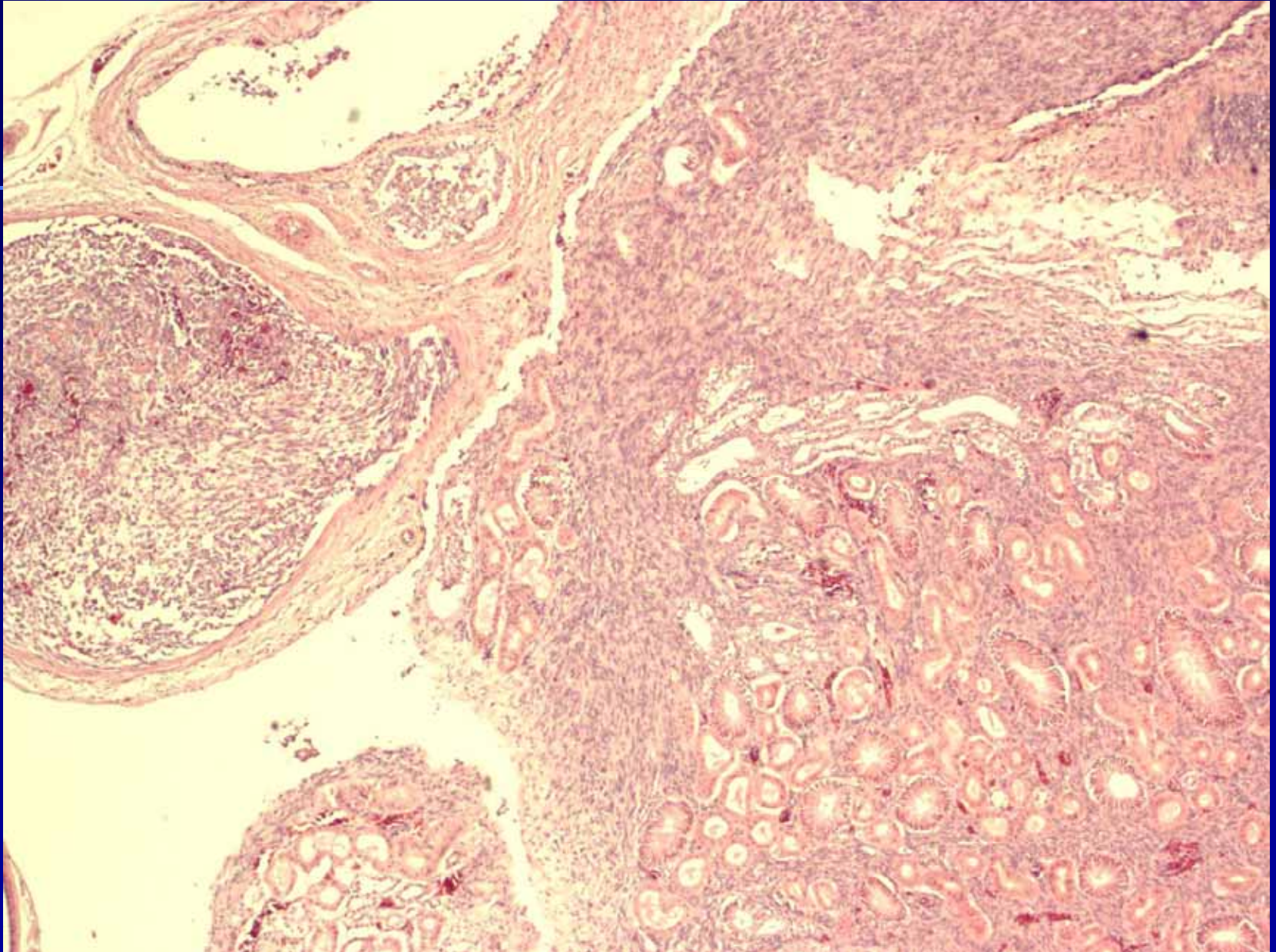


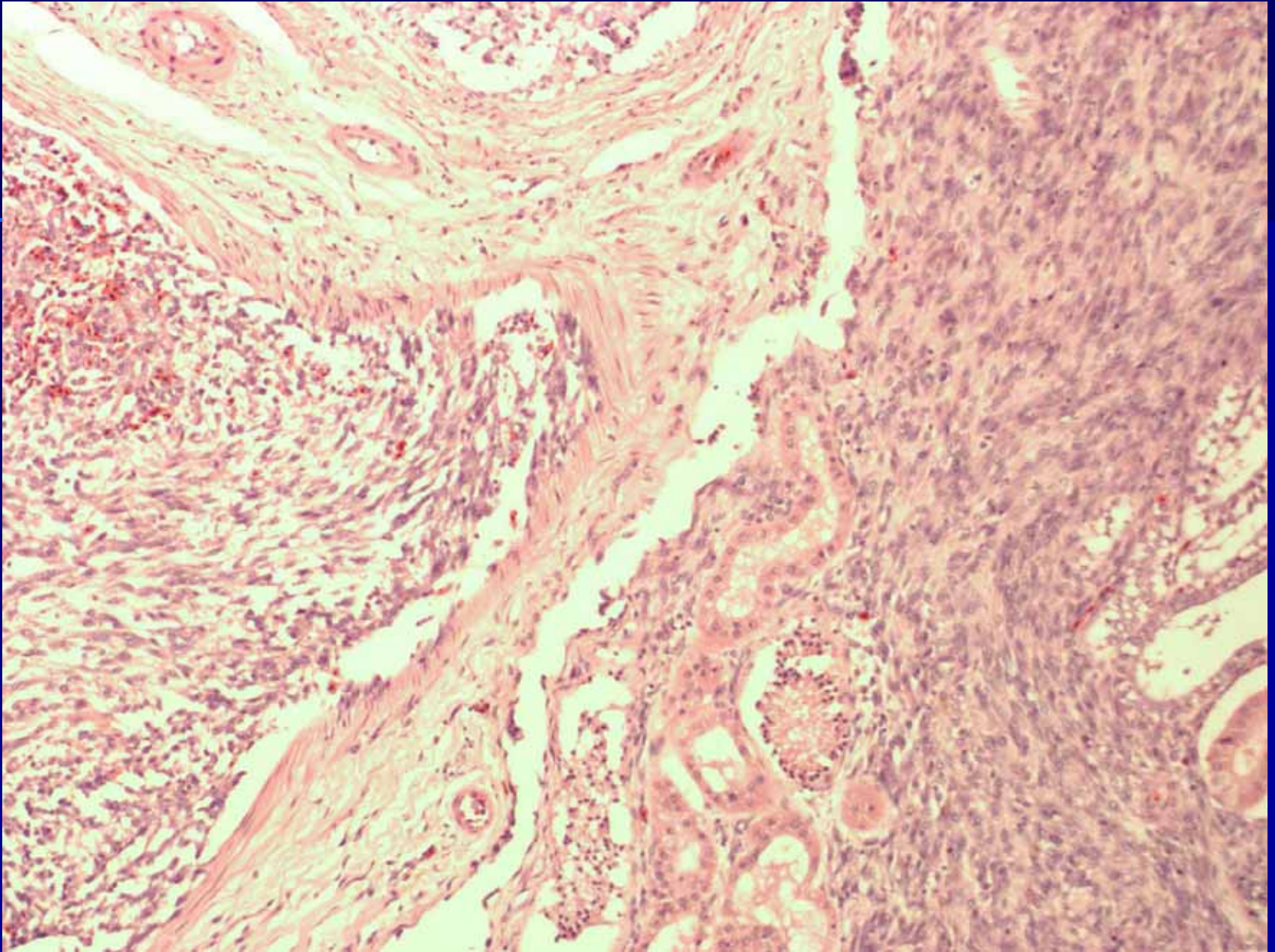
Liver



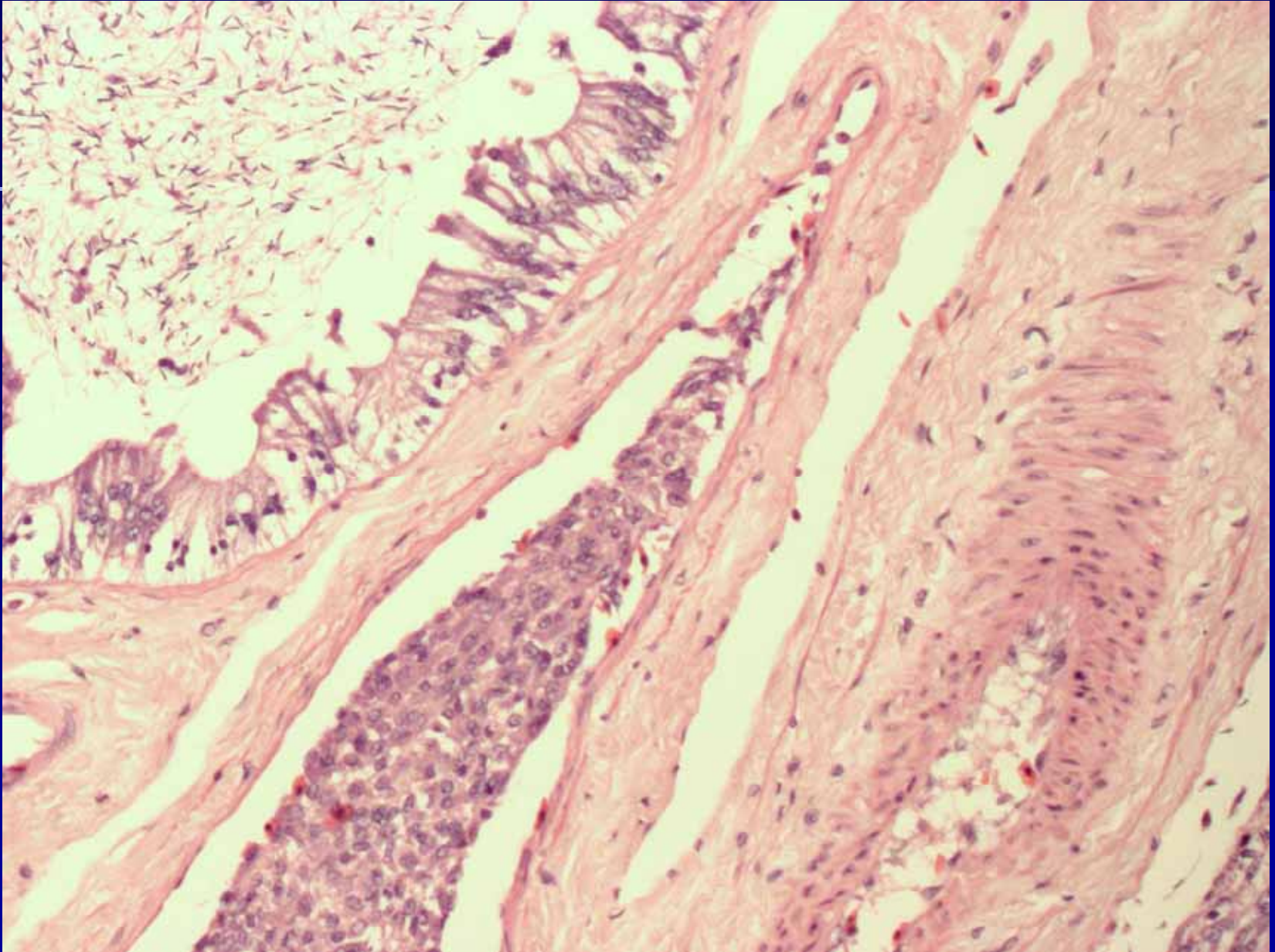


Kidney





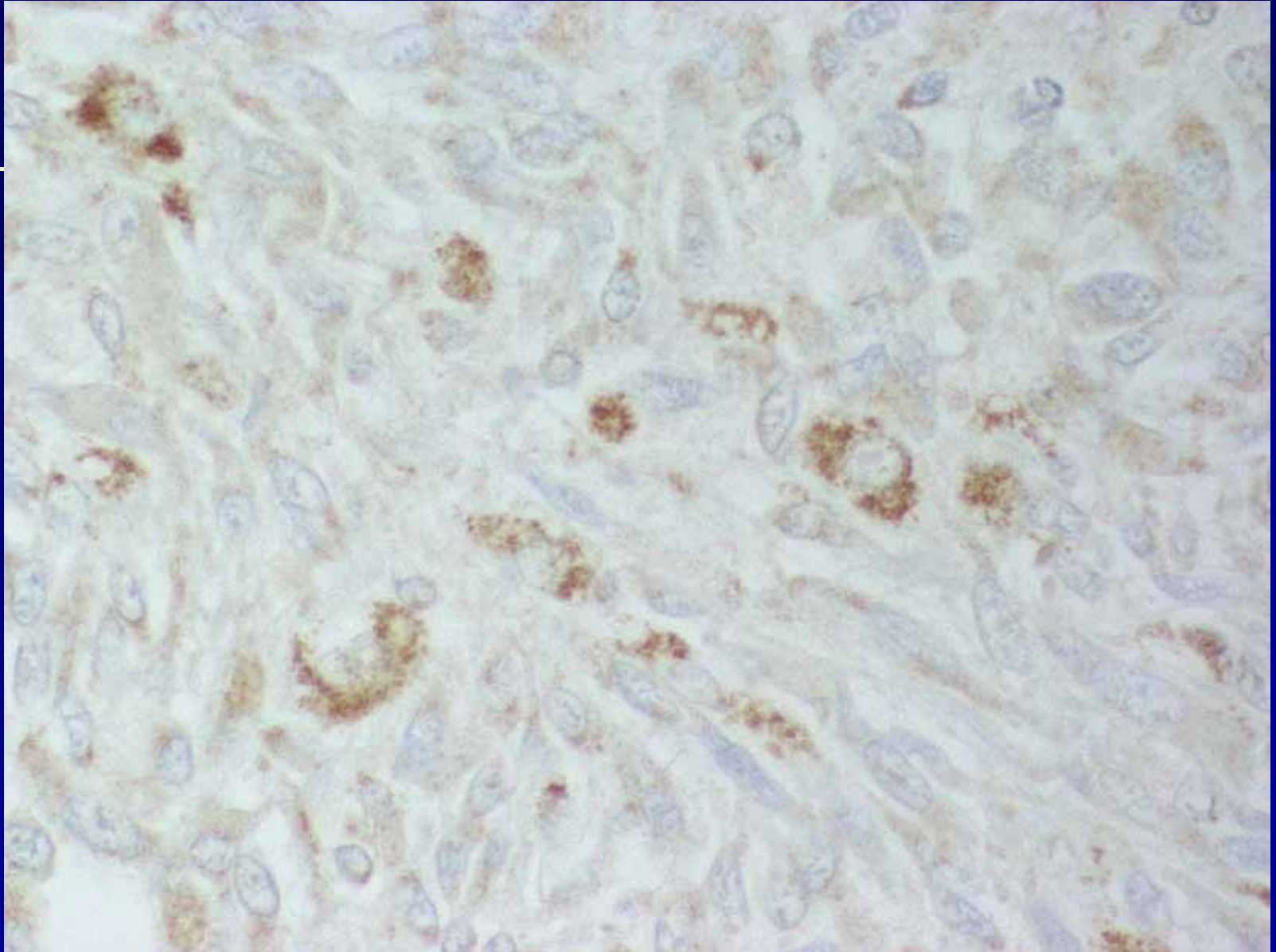
Testicle



Immunohistochemistry

- Vimentin - mild and diffuse staining
- Smooth Muscle Actin - diffuse and moderate intracytoplasmic staining
- CD117 (c-Kit) - multifocal and moderate intracytoplasmic staining

CD117 (c-Kit)



Diagnosis

- Spindle cell sarcoma most suggestive of Gastrointestinal Stromal Tumor (stomach, liver, heart, lung, kidney and testicle)

Comments

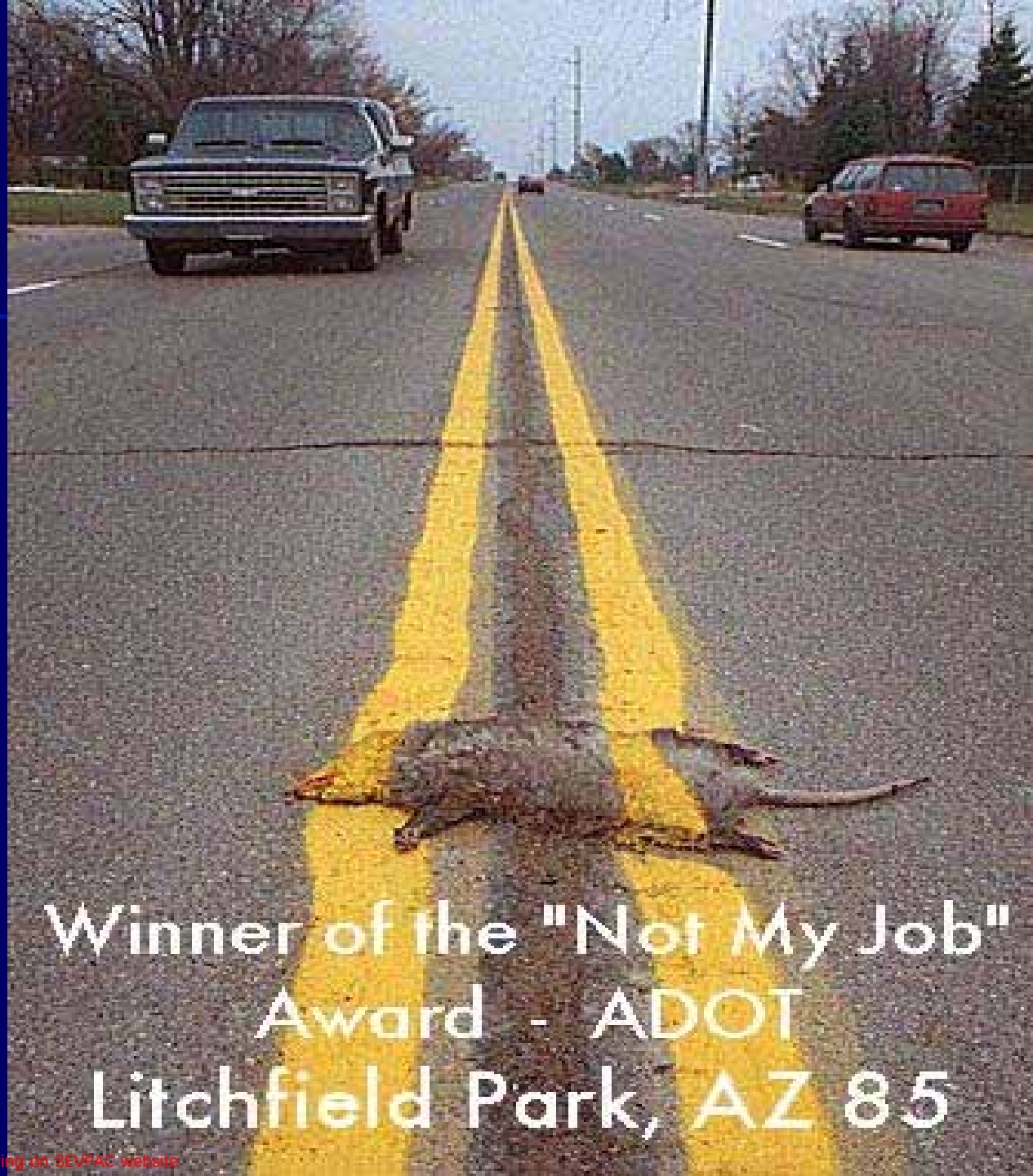
- Gastrointestinal stromal tumors (GISTs) are digestive mesenchymal neoplasms that are differentiated from neurogenous or myogenous neoplasms (schwannomas and leiomyomas or leiomyosarcomas, respectively) by the expression of KIT.

Smooth Muscle tumor (SM) vs GIST

■	<u>GIST</u>	<u>SM</u>
■ Vimentin	+	+
■ SMA	+/-	+
■ CD117 (c-Kit)	+	-

Comments

- Gastrointestinal stromal tumors are derived from interstitial cells of Cajal, also known as gastrointestinal pacemaker cells, or from their progenitor cells
- In veterinary medicine, GISTs have been reported in dogs, horses, a rat, and nonhuman primates.



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