Data Collection and Preprocessing

WebPathology Visual Survey of Surgical Parthology Tube This as being a striated or myocardium it looks

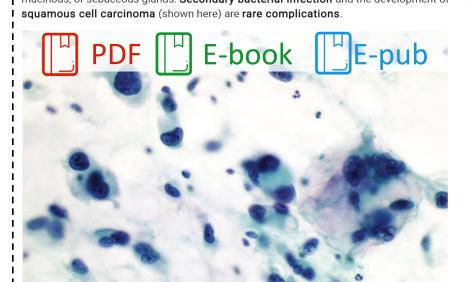
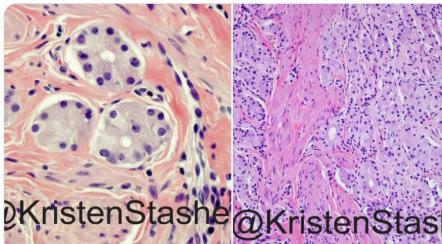


FIGURE 5.6.12 High-power view of a fixed cytologic preparation of myxofibrosarcoma. There is nuclear pleomorphism and irregularity of the nuclear outlines. In addition, binucleate and multinucleate cells are identified.

Throwing it back old school today--a case from fellowship!!! Had this periampullary tumor on the hot seat rotation and its where I learned how WD NET (esp. in this area) can have a tubular/pseudoglandular pattern.
#Glpath #notadenocarcinoma



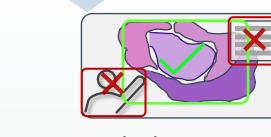
Pre-processing Tools



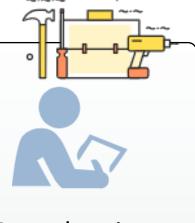
&Parse



Pathology Image Selection



Pathology Image Detection

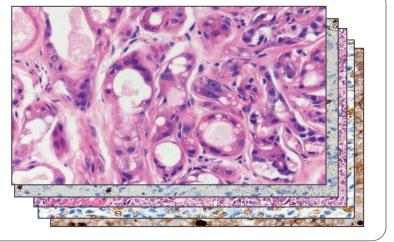


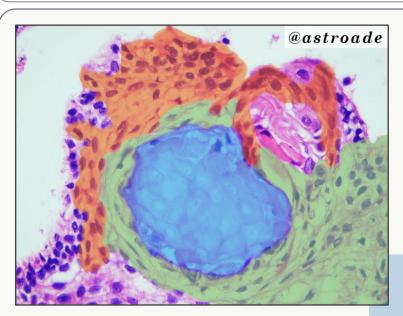
Manual review

Detailed Description Generation

Text-image pairs

Captions





Caption: Digging Up Memories 2: 6 yob w/intracranial hypertension. Adamantinomatous craniopharyngioma w/extensive adjacent gliosis NeuroPath



Description Generation via Caption Refinement with GPT-4V(ison)

Detailed description:

The microscopic image presented shows a cluster of epithelial-like cells arranged in a whorled pattern around a pink stellate reticulum area, which is characteristic of adamantinomatous craniopharyngioma. There is a loose connective tissue component surrounding the epithelial cells, indicative of gliosis, which is a reactive process of astrocytes in response to the adjacent tumor. The cells exhibit a range of sizes and have varying shapes from spindle to more polygonal, and the nuclei appear dark and hyperchromatic. Overall, the morphology is consistent with a neoplastic process, specifically an adamantinomatous craniopharyngioma with a reactive gliotic stroma.

Question Generation and Expert Validation

GPT-4V Detailed description

Based on the provided pathological image and its description, develop 3 high-quality multiple-choice questions with these guidelines:

- Focus on cell and tissue morphology or diagnosis.
- Questions and choices should require analysis of the image to answer.
- Options should be equally plausible, related to the image's subject.
- Include answers and explanations for each question.

Prompts for Q&A generation

Questions

Answers

Explanations



LLMs vote for which question can be guessed text-only



†A?	Validity of the question	Valid Invalid
	Reasons for	It can be answered Unable to find relevant features in the picture.
Expert Validation	the invalidity of the topic.	The answer is wrong. The question other