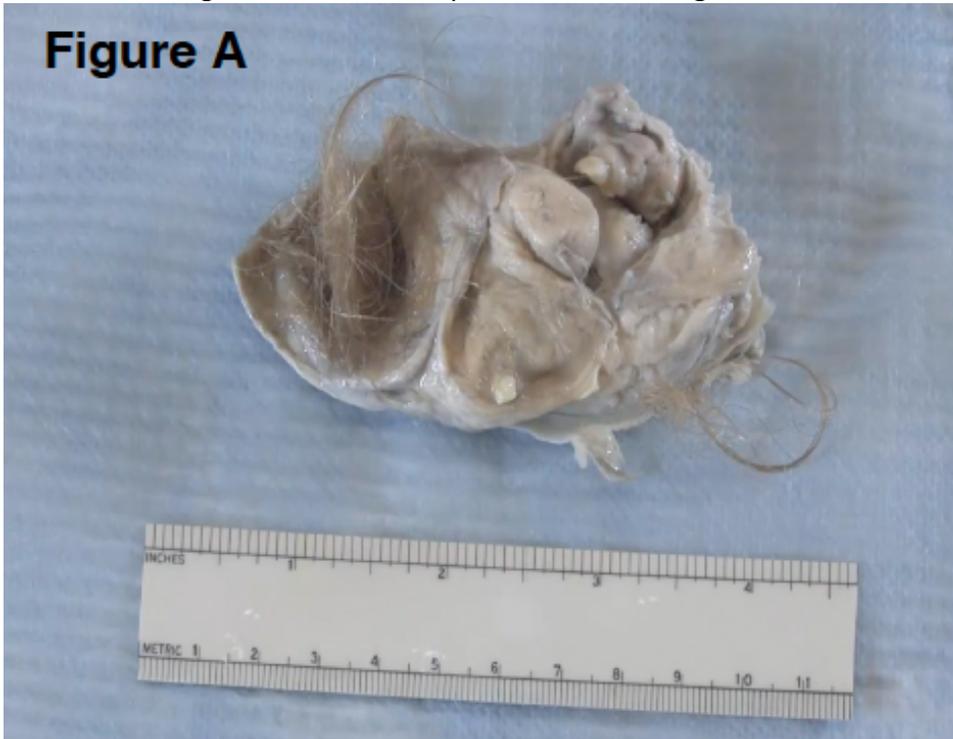


Case Study #1, August 18, 2022

A 45 year old female presented with abdominal pain that had gradually increased in severity over the past three months. An abdominal x-ray was performed showing an approximate 3-inch diameter mass with varying contrast (increase in white instead of black) near or on the right ovary. A CT scan performed on the abdomen confirmed the presence of the mass that was encapsulated in the ovary and contained varying tissue structures. Surgical resection was performed and surgeons removed the mass that looked like figure A.



Sections of the mass were made (we will talk about this process later in class) and stained with hematoxylin and eosin (we will talk about this in more detail later in the class) and a low magnification picture was taken (Figure B) followed by three higher magnification pictures (Figures C,D,E) taken in the areas indicated by letters in Figure B.

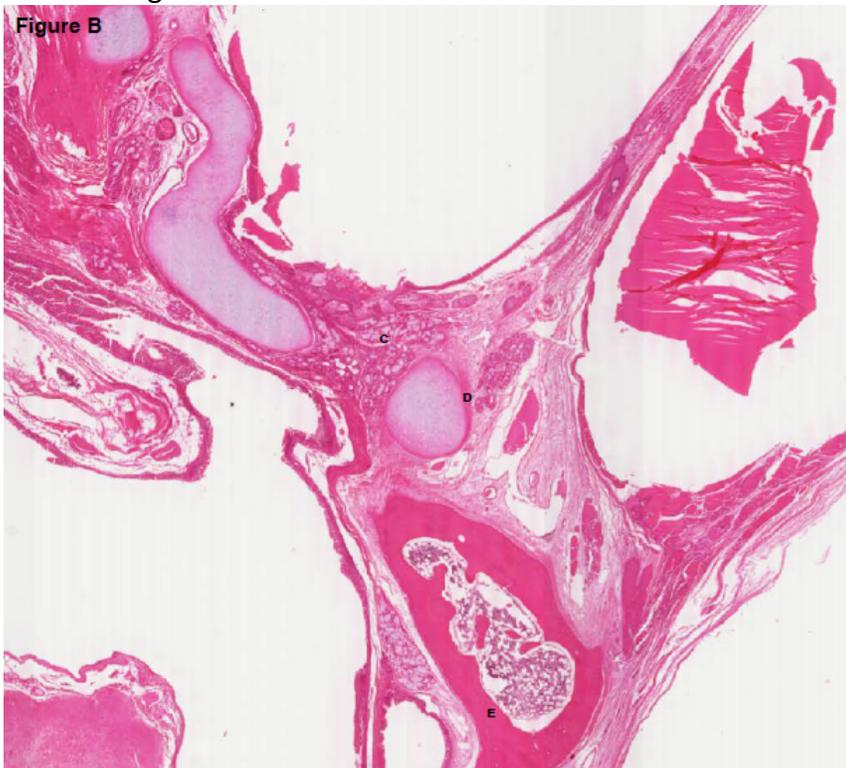


Figure C

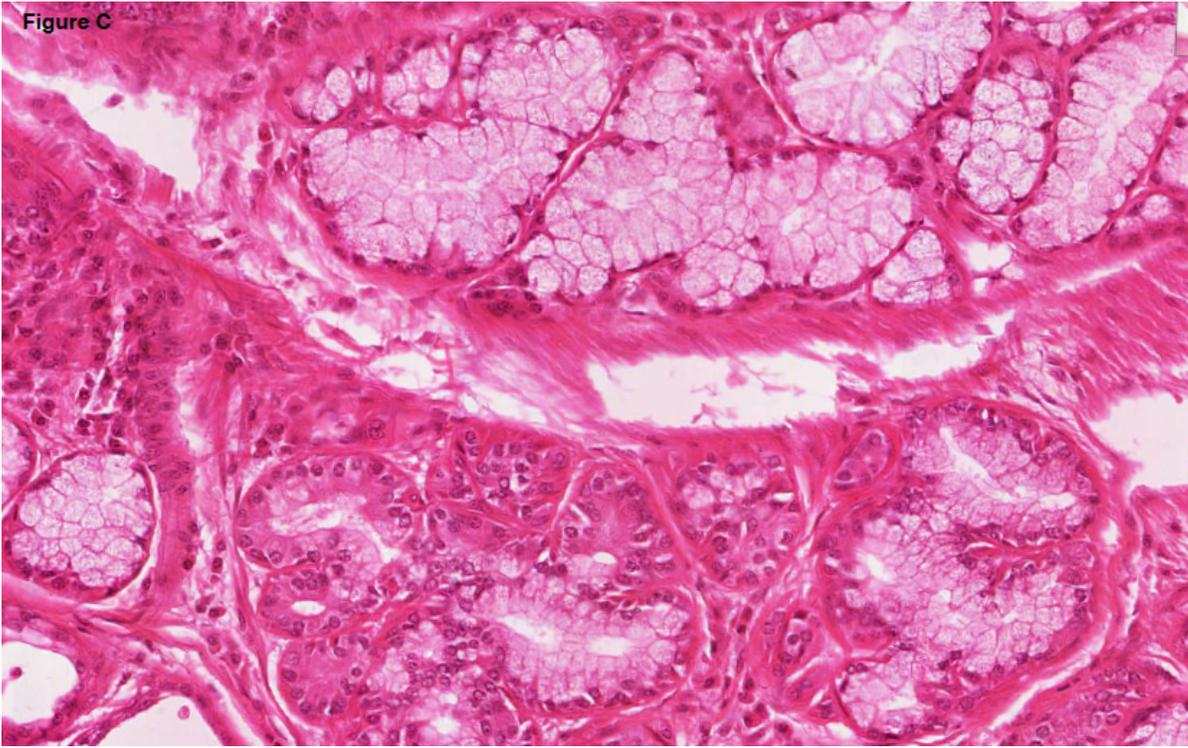


Figure D

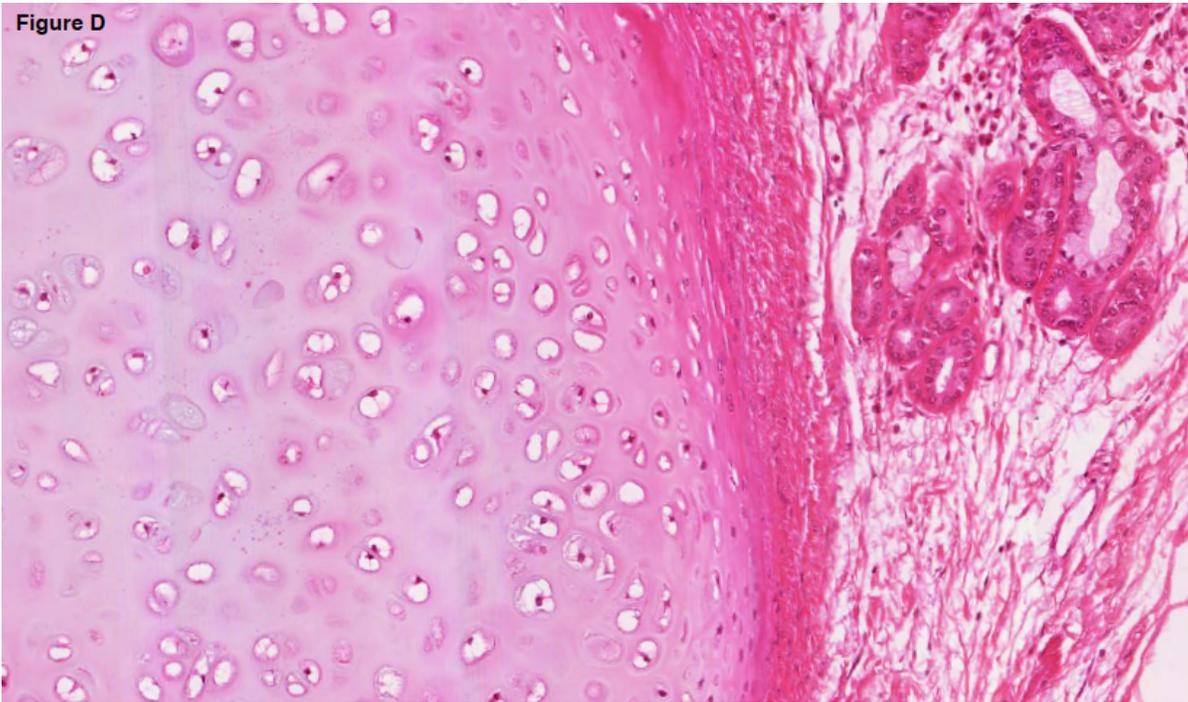
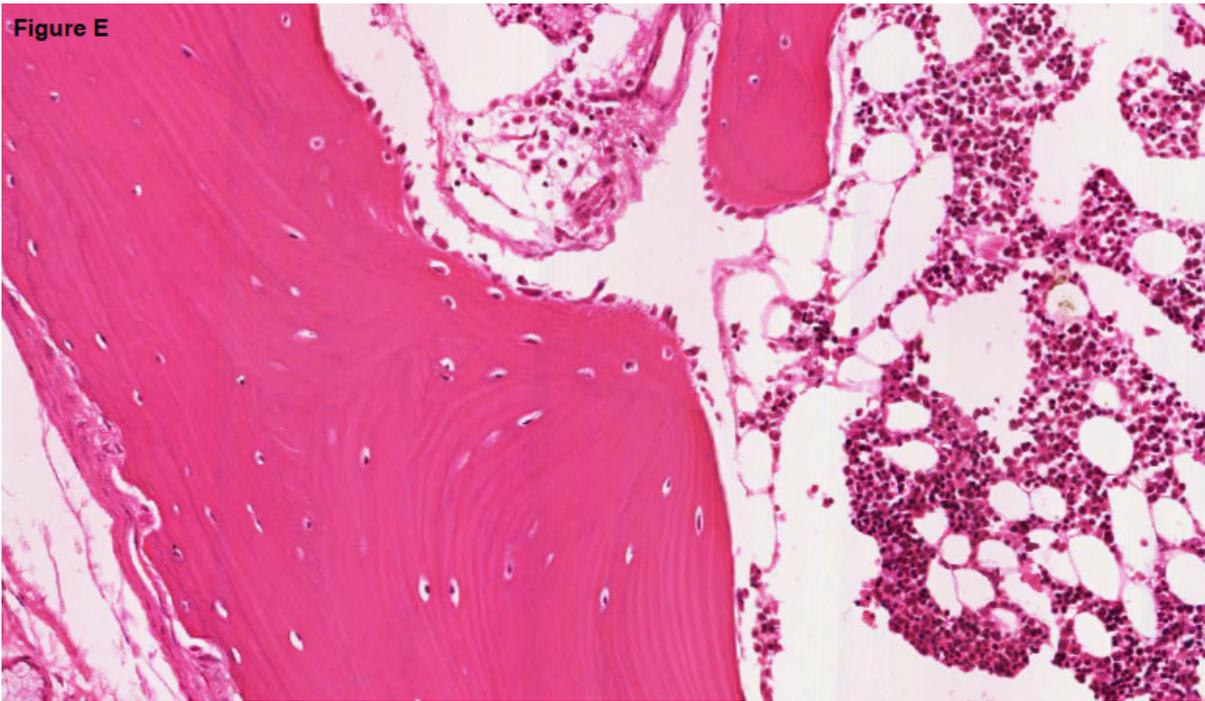


Figure E



Discussion Points:

From the gross specimen what do you see that you think is unusual? Do any of these unusual items help to understand why there was varying contrast in the X-ray?

In Figure B, what is your initial observation here? Does any of this tissue look normal? Is there any organization in any regions of this tissue? What type of organization do you see?

In Figure C, can you identify what may be nuclei of cells? Do you think the areas that look “foamy” are cellular? Do you think this is one tissue type or multiple and why did you make your conclusion?

In Figure D, what is different or similar to this area of the tissue compared to Figure C? Do you think any of these areas of the tissue are the same tissue as what you observed in Figure C? Can you identify nuclei in Figure D, if so, do these nuclei look like what you saw in Figure C?

In Figure E, what is similar or different in this picture compared to figures C and D? Can you identify nuclei in this picture if so, do the nuclei show any form of organization? In the red/pink part do you see any pattern in this part of the tissue?

Overall, if you were advising the patients doctor would you be concerned with this mass growing again in the patient? Do you think this mass came from a single cell type and does the location of the mass provide any clues to answer this?