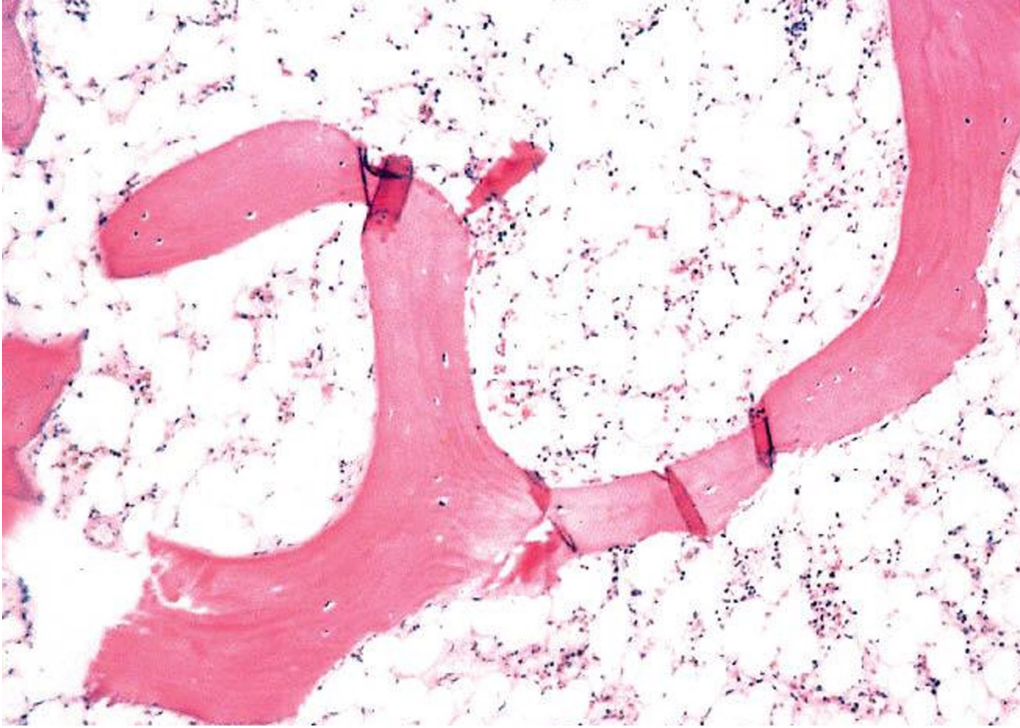
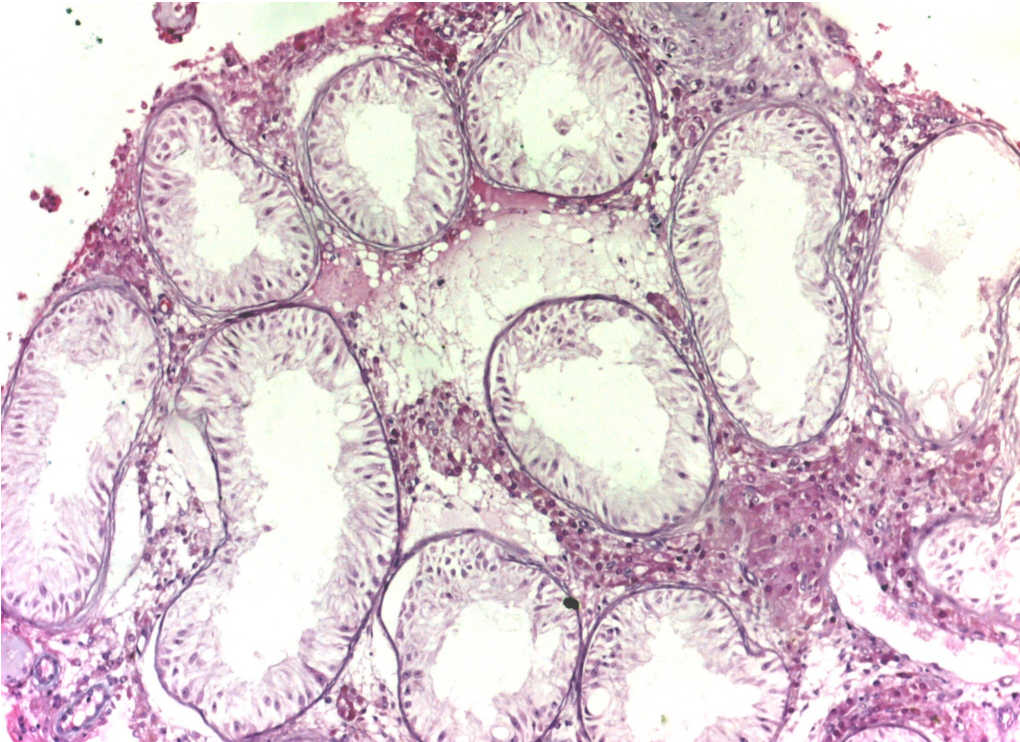


Section

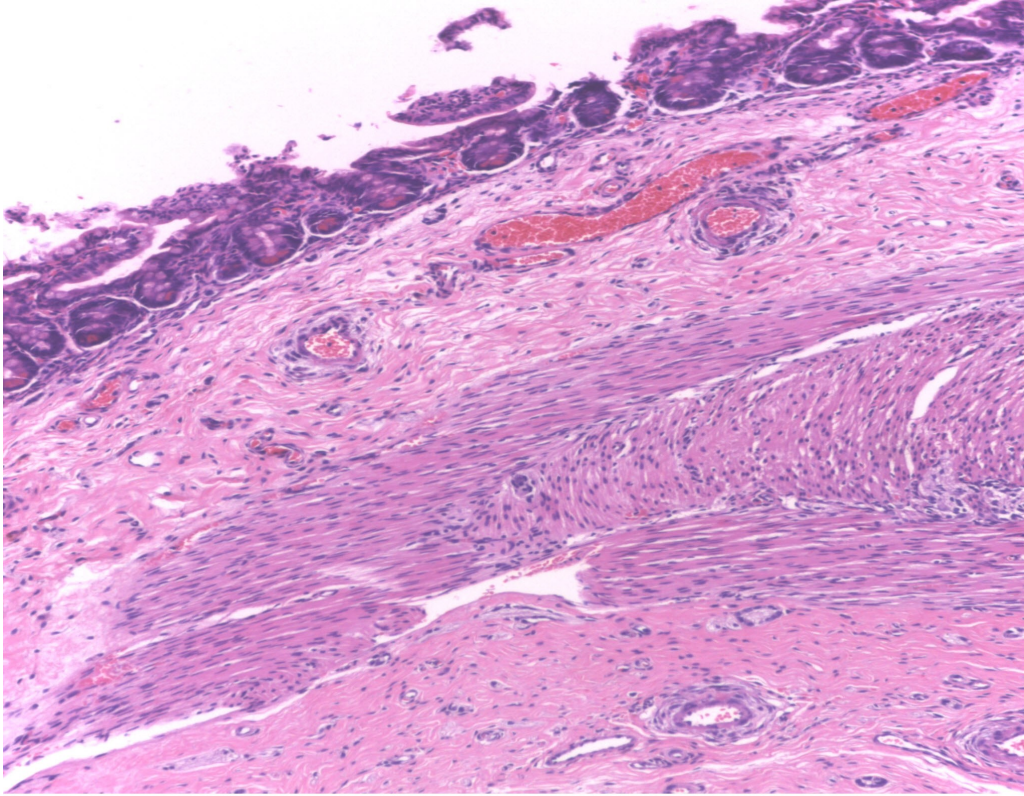
1 Developmental Abnormalities



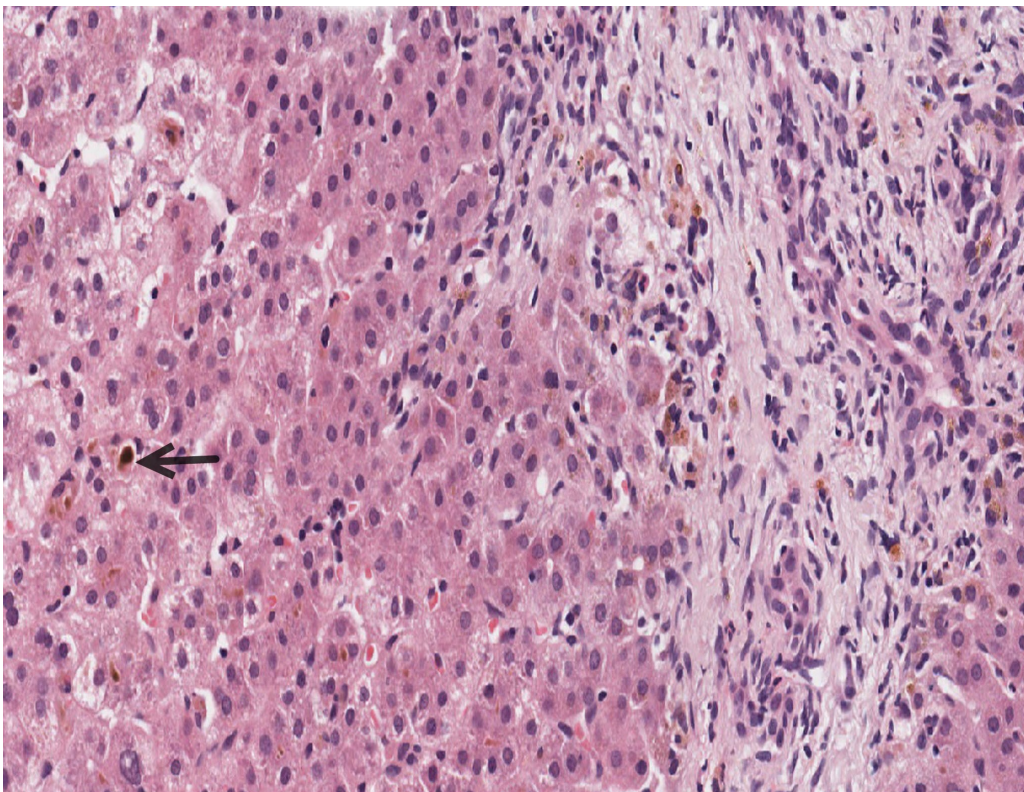
P 4-1. Bone marrow biopsy, aplastic anemia. Hypocellular marrow with fat predominance and complete absence of hematopoietic cells involving all three lineages "courtesy of PathologyOutlines.com".



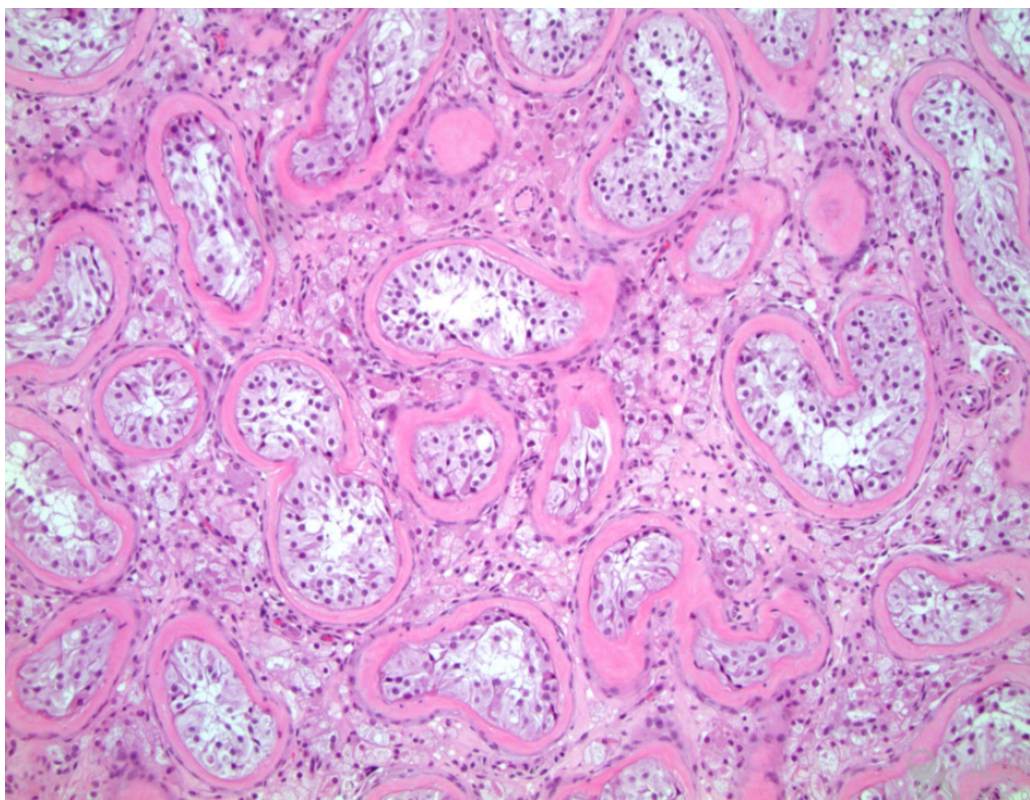
P 4-2. Testicular biopsy, Sertoli cell only syndrome. Tubules lined only by Sertoli cells which are perpendicular to basement membrane. There is complete absence of germ cells.



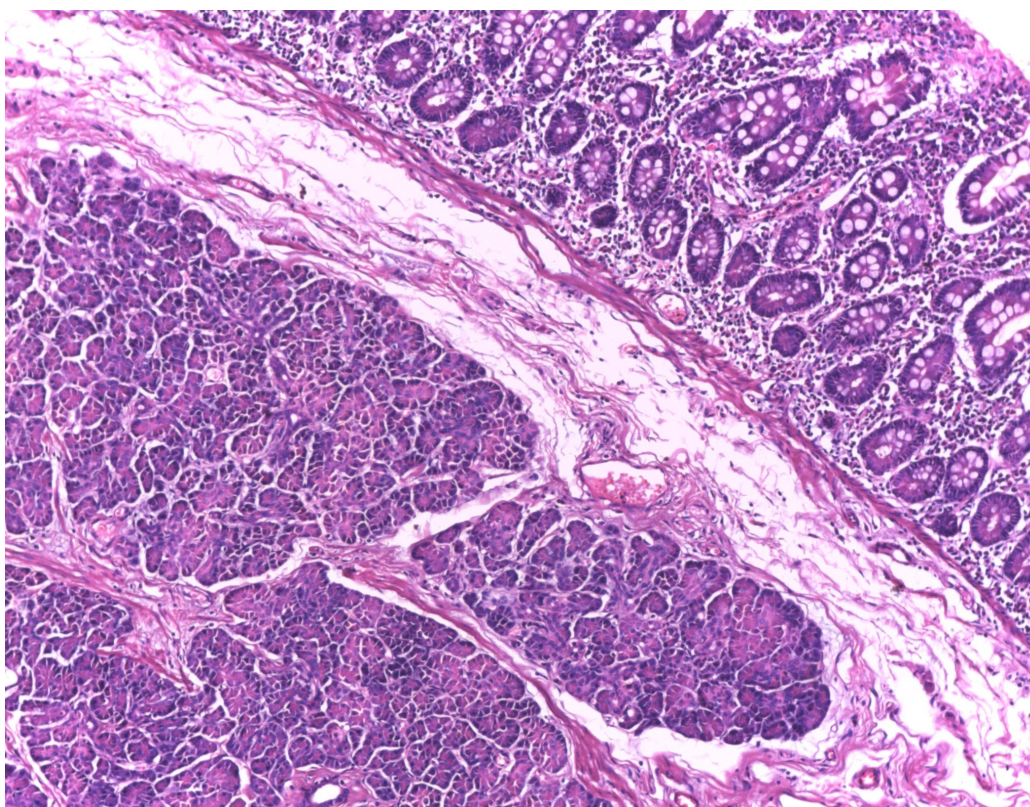
P 4-3 Colon biopsy, aganglionic Hirschsprung's disease. Ganglion cells are absent in both submucosa and muscle layer.



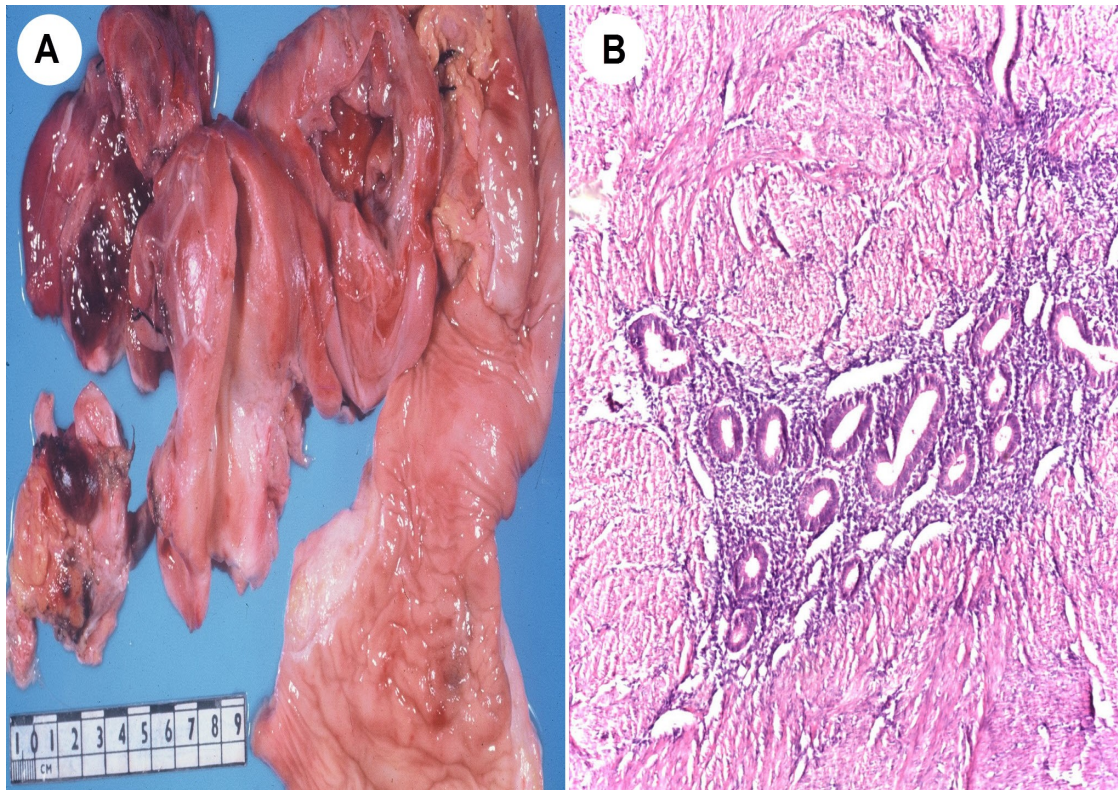
P 4-4. Liver, biliary atresia. Bile accumulation in cytoplasm of hepatocytes (cholestasis) and canaliculi filled with bile (arrow). Associated portal fibrosis and inflammatory reaction (Rt field).



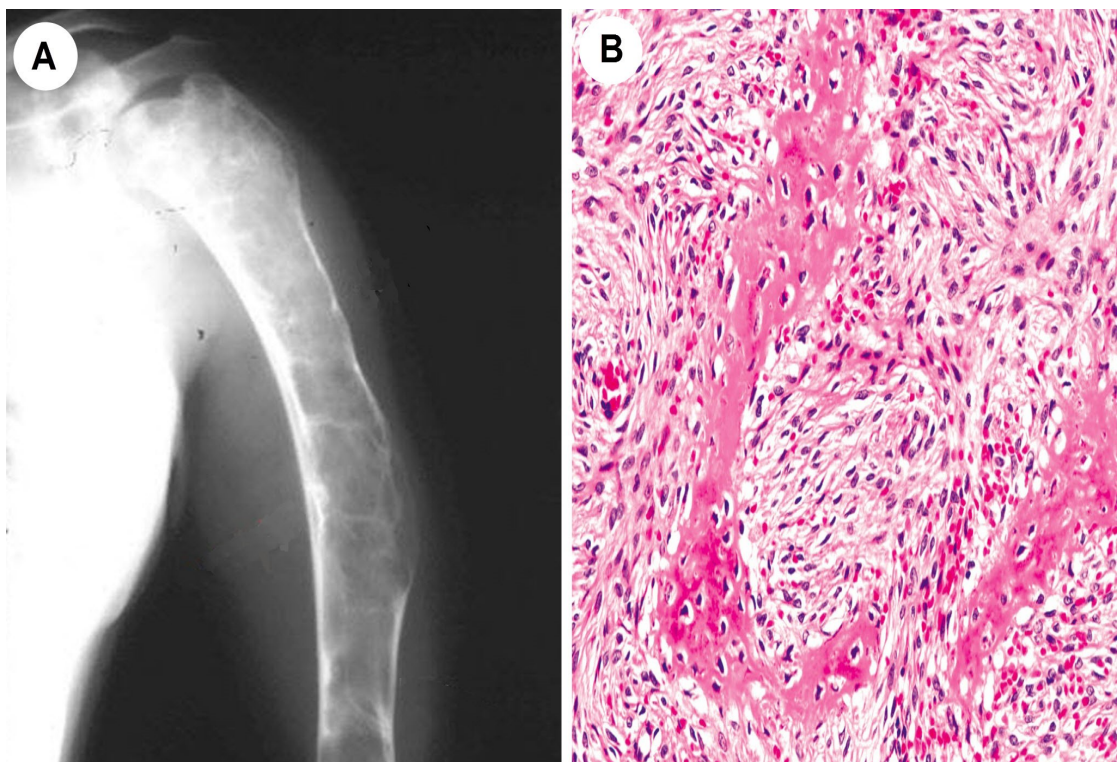
P 4-5. Undescended fetal testis. Seminiferous tubule with thickened basement membranes, lined by Sertoli cells only with no spermatogenesis "courtesy of PathologyOutlines.com".



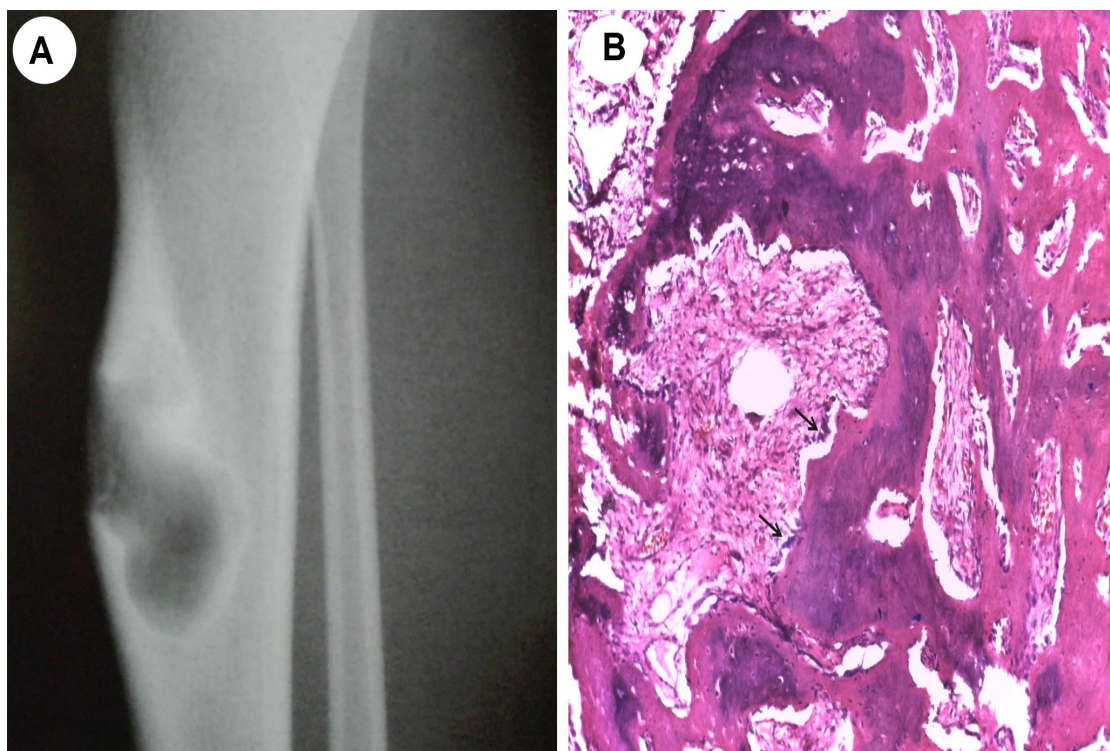
P4-6. Ectopic pancreatic tissue (lower left) in Meckel's diverticulum.



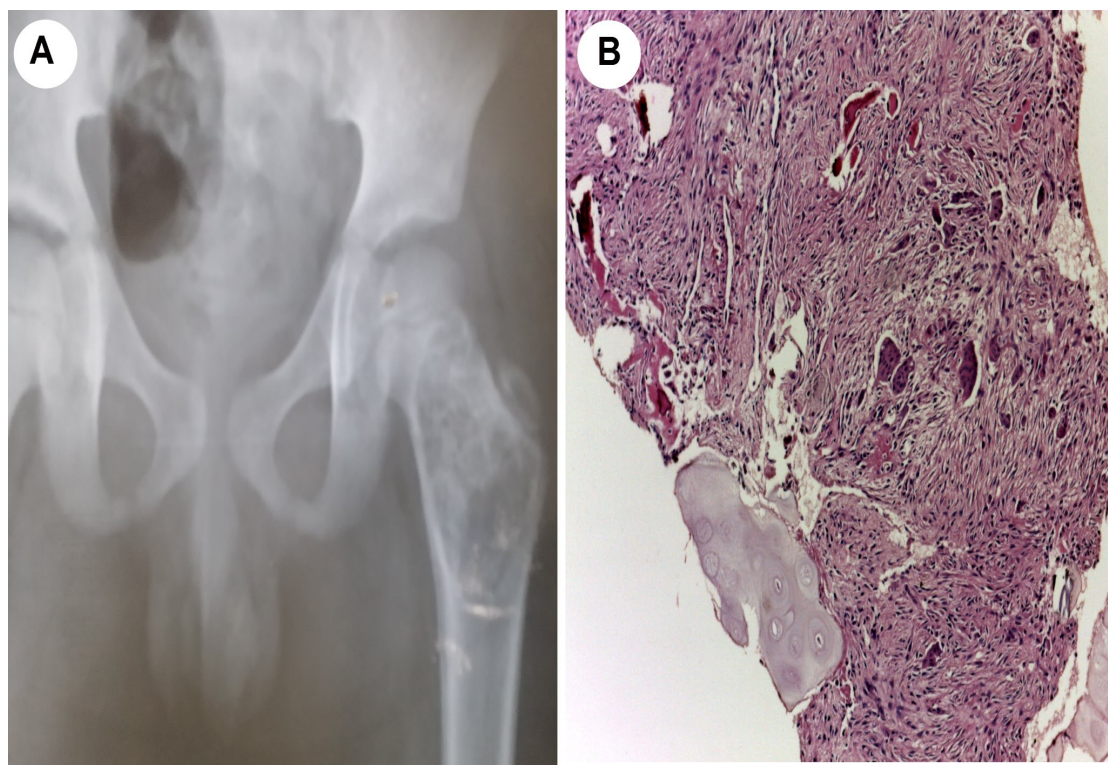
P 4-7. Endometriosis. A Ovary & uterine tube show multiple hemorrhagic cysts with adhesions involving small intestine. **B** Ectopic endometrial glands and stroma.



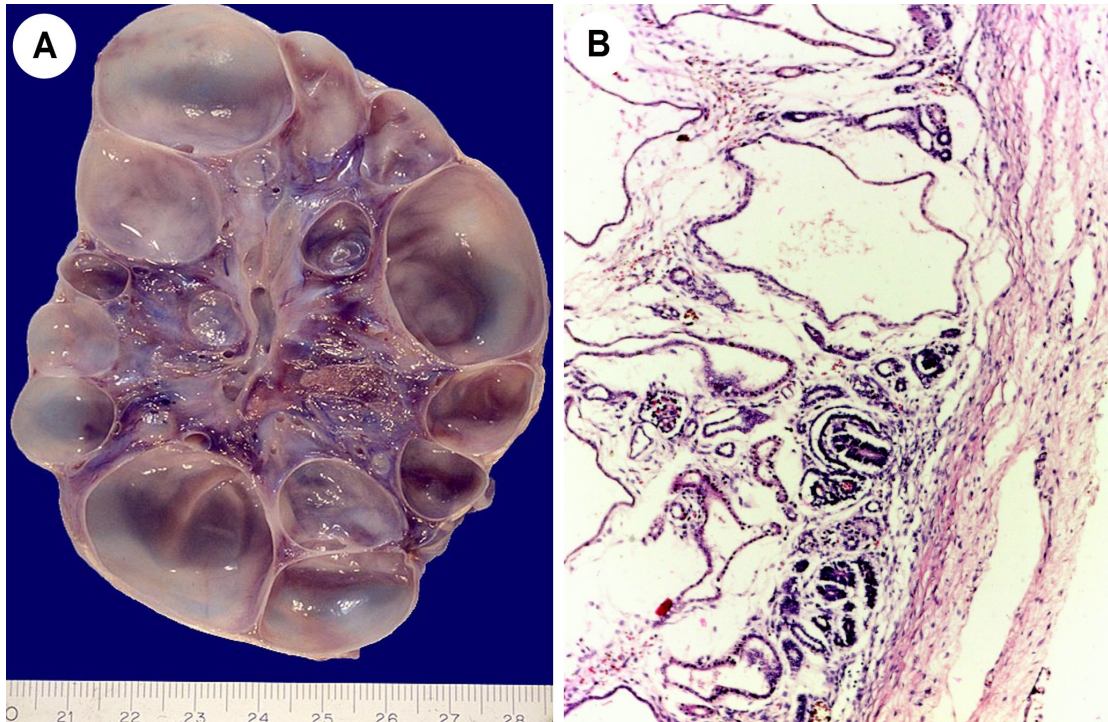
P 4-8. Fibrous dysplasia of Lt humerus. A Plain radiograph shows intramedullary lytic lesion with ground glass appearance. **B** Curvilinear trabeculae of dysplastic osteoid lacking osteoblastic lining. The cellular stroma is composed of bland fibroblasts.



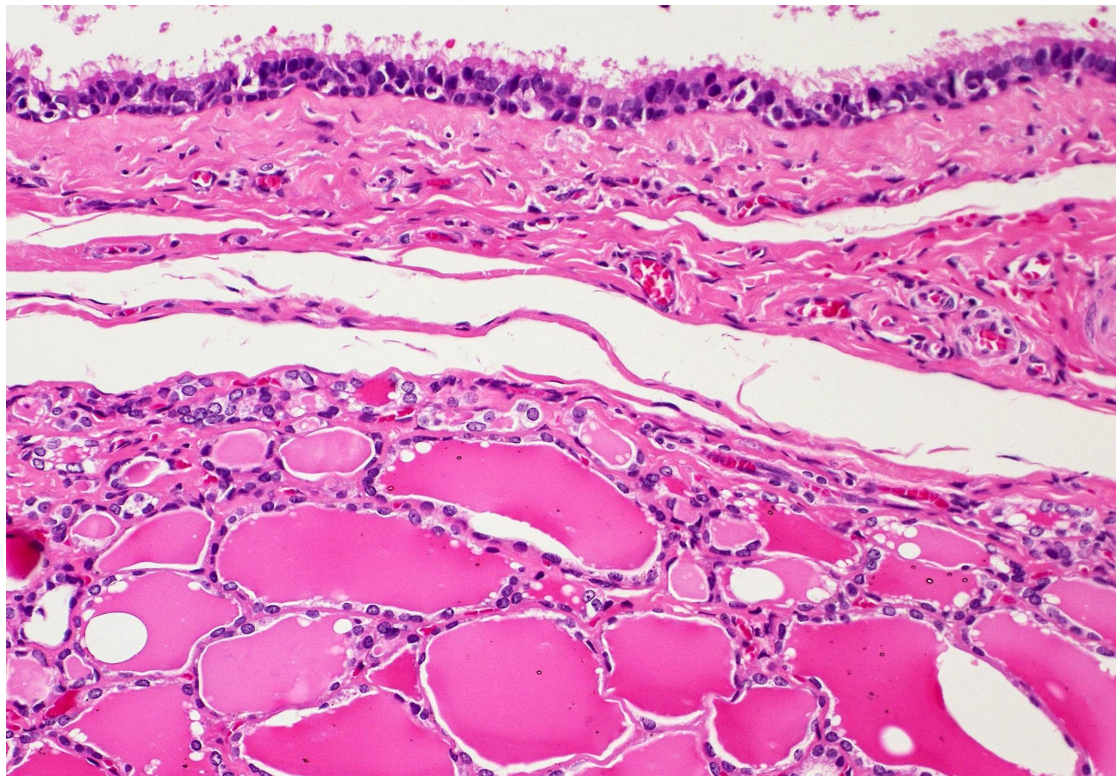
P 4-9. Osteofibrous dysplasia of tibia. **A** Plain radiograph shows cortical based radiolucent lesion with well-defined margins. **B** Spindle cell proliferation with production of woven bone trabeculae with osteoblastic rimming (arrows).



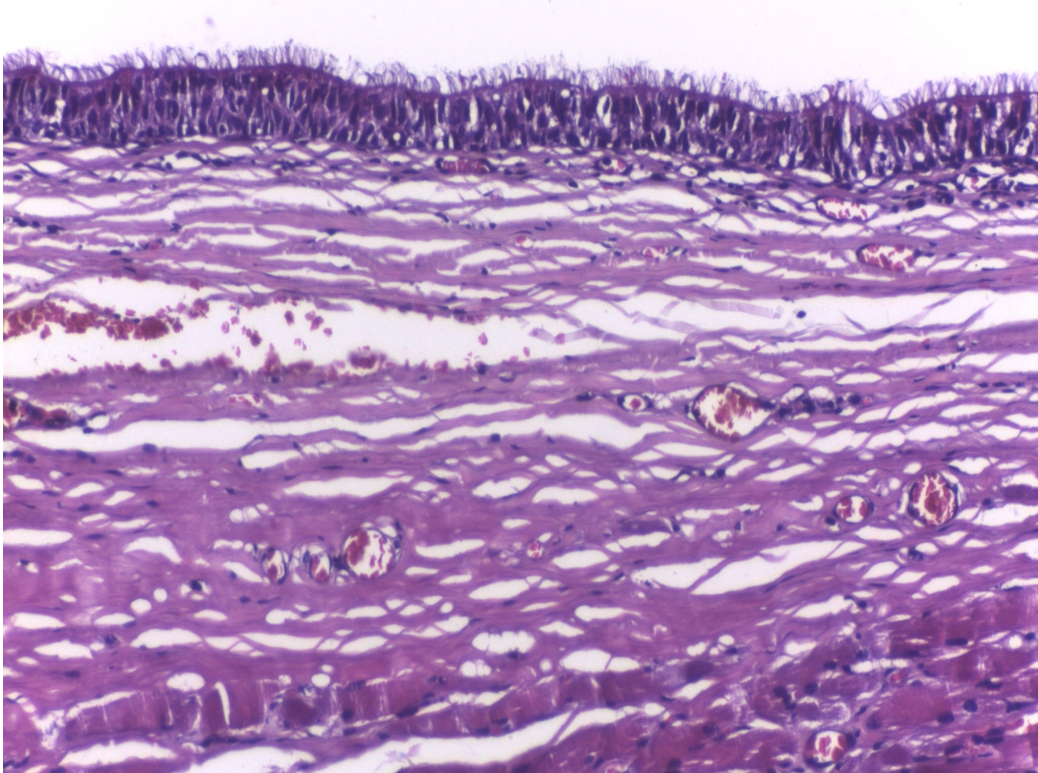
P 4-10. Chondrofibrous dysplasia. **A** Plain radiograph shows a lytic intramedullary lesion of upper Lt femur. **B** A complex arrangement of cartilage, bone, fibroblasts and osteoclasts with lack of any anaplasia and mitosis.



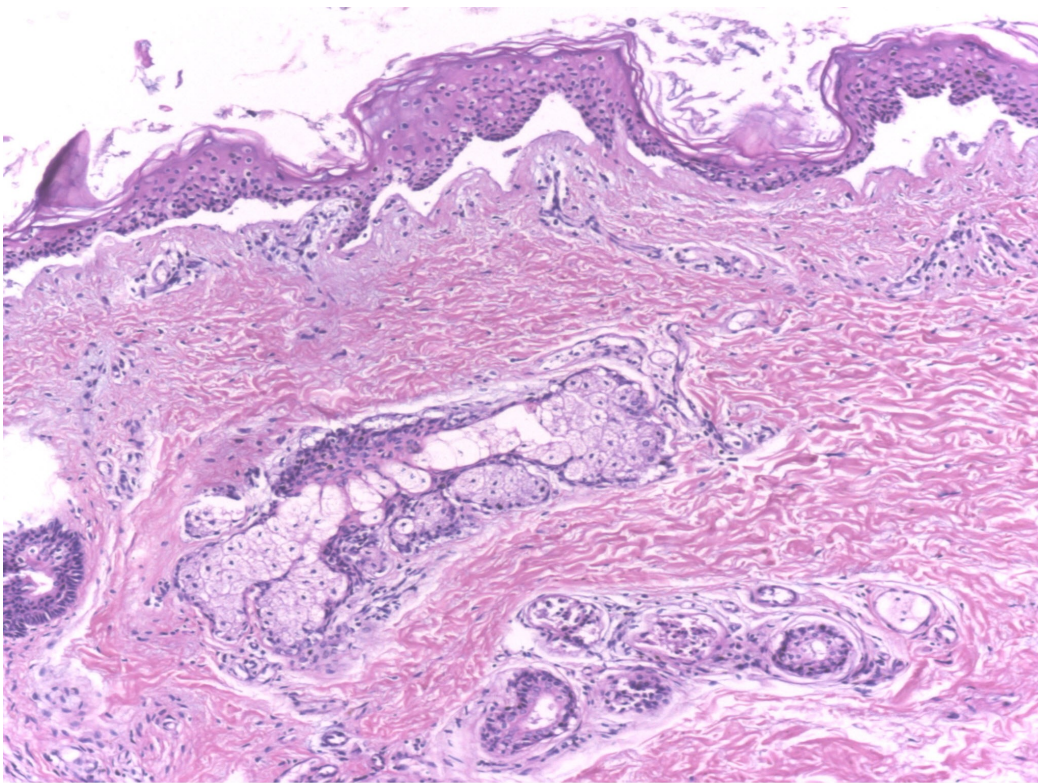
P 4-11. Renal Dysplasia. **A** Variable sized cysts replacing renal parenchyma "courtesy of PathologyOutlines.com". **B** Renal tubules, glomeruli and stroma have a disorganized pattern characteristic of dysplasia. Cystic tubules are evident. Rarely islands of cartilage may occur (not shown in picture).



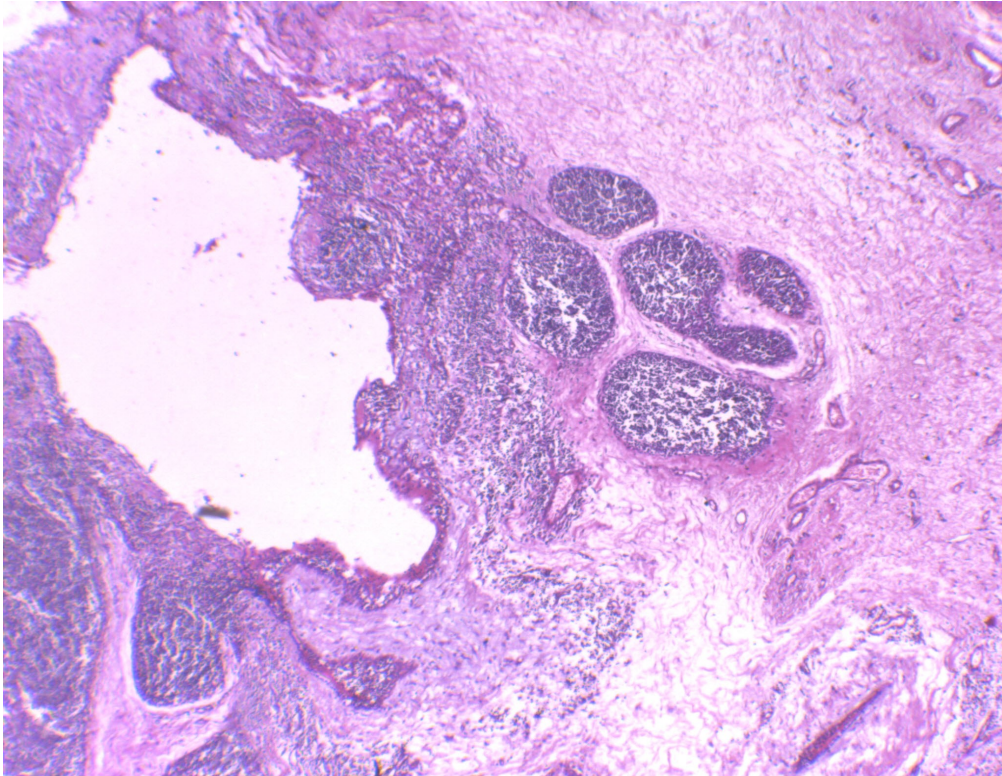
P 4-12. Thyroglossal duct cyst. The cyst occurs in anterior midline of neck. It is lined by respiratory epithelium with underlying thyroid follicles. The lining may also be squamous type "courtesy of PathologyOutlines.com".



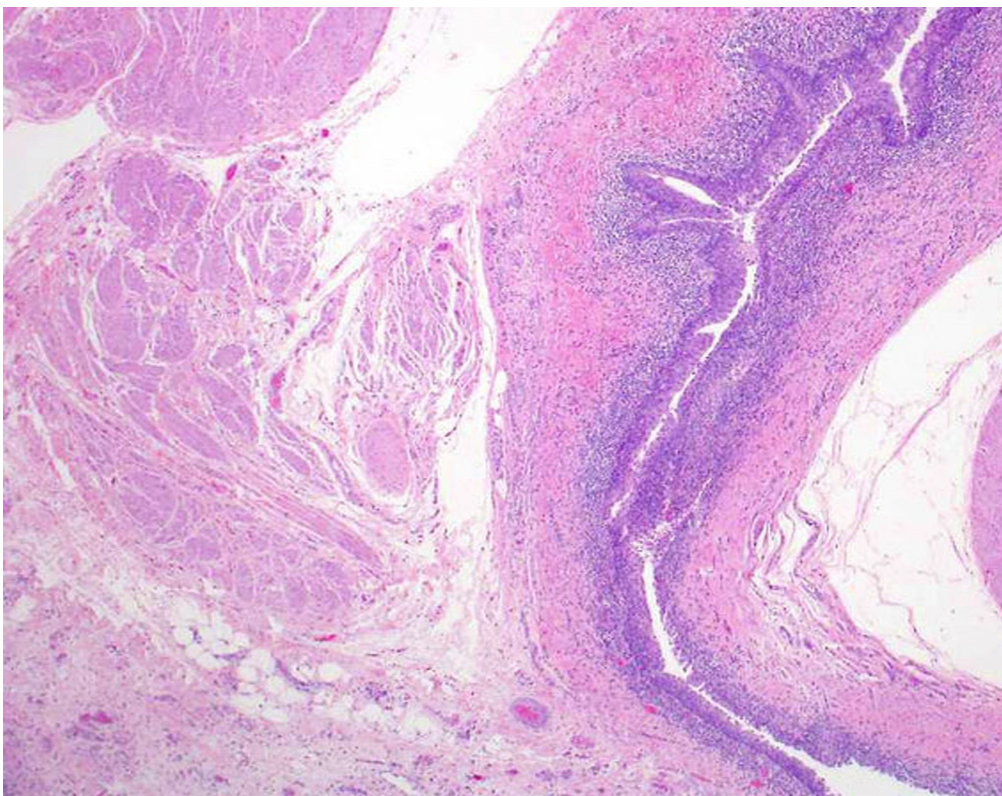
P 4-13. Bronchogenic cyst. Cyst wall lined by respiratory-type epithelium (pseudostratified columnar ciliated) with underlying fascicles of smooth muscle "courtesy of PathologyOutlines.com".



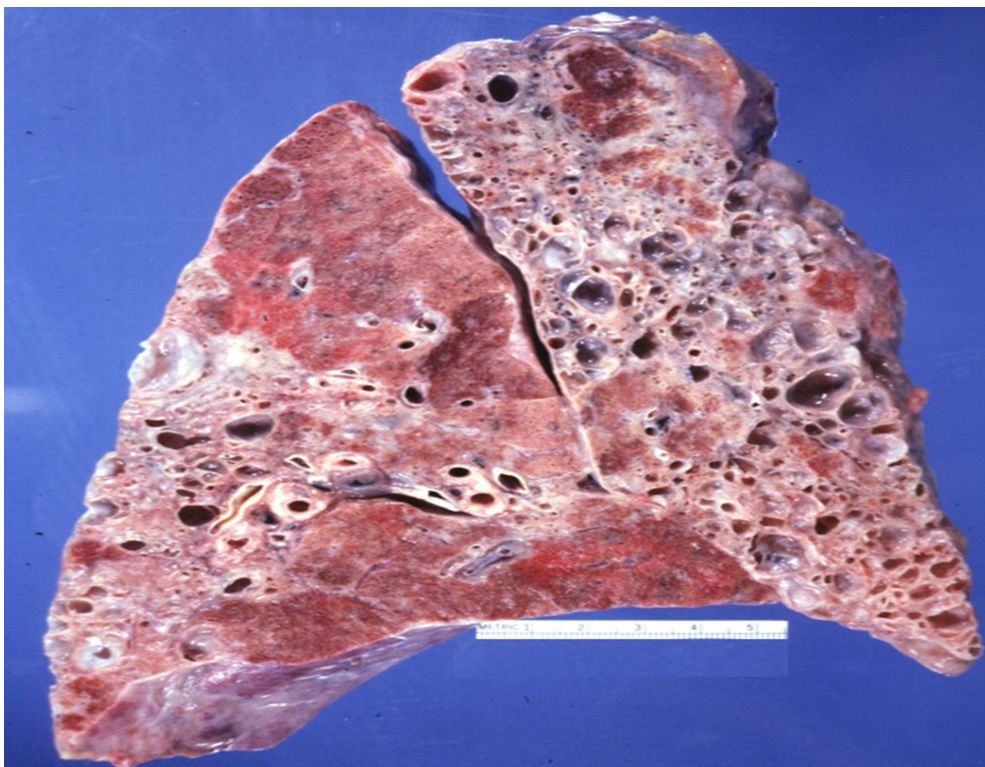
P 4-14. Skin, external angular dermoid cyst. Cyst wall lined by stratified squamous epithelium with associated sebaceous glands. These adnexal structures are lacking in epidermal inclusion cyst.



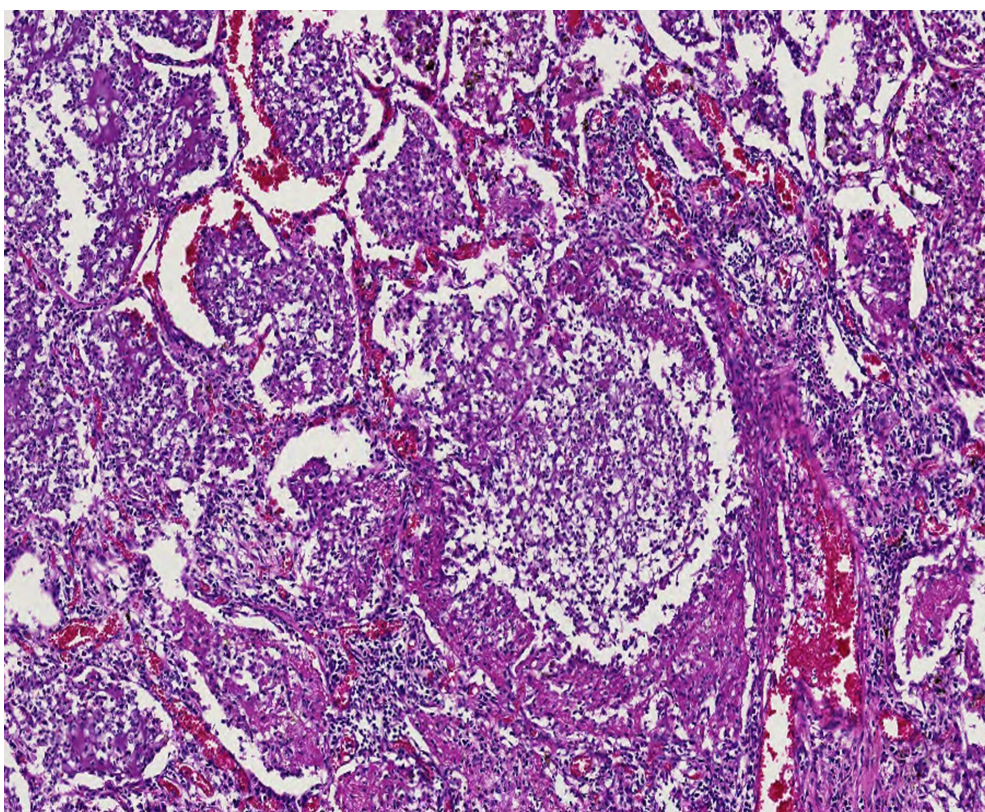
P 4-15. Branchial cyst. The cyst is lined by stratified squamous epithelium and the wall is rich in lymphoid tissue. The cyst is commonly unilocular, rarely multilocular.



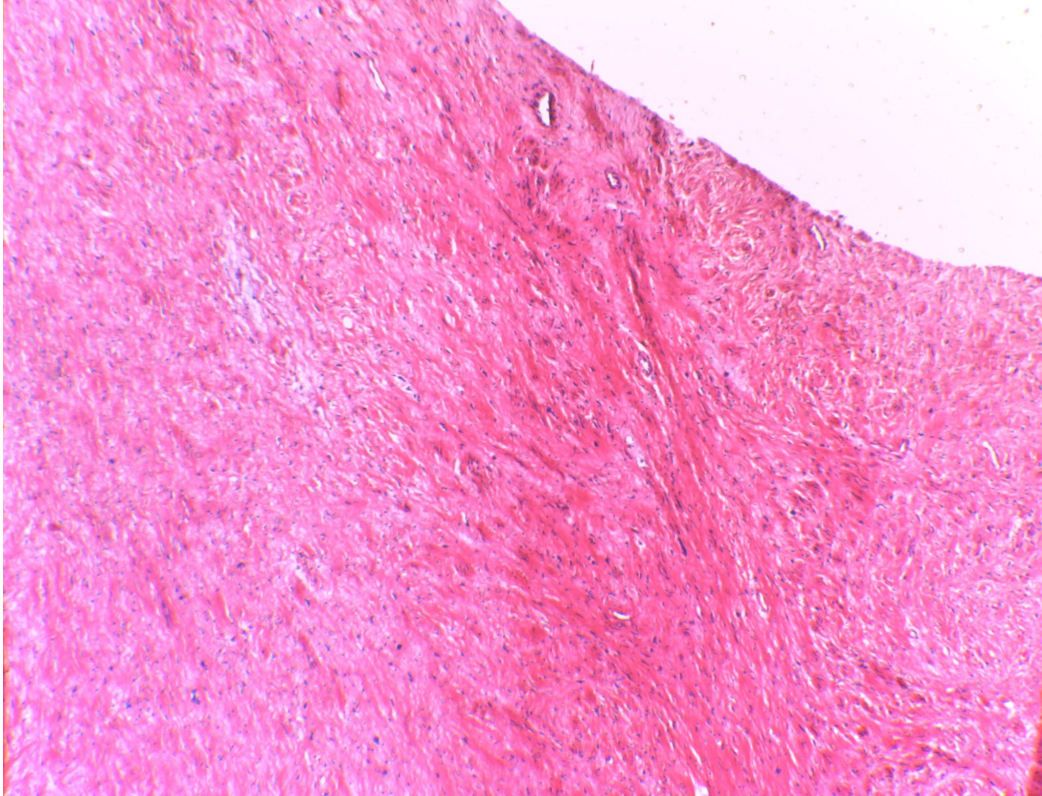
P 4- 16. Urinary bladder dome and mid line below umbilicus, urachal cyst. The cyst is lined by columnar epithelium and a fibromuscular wall.



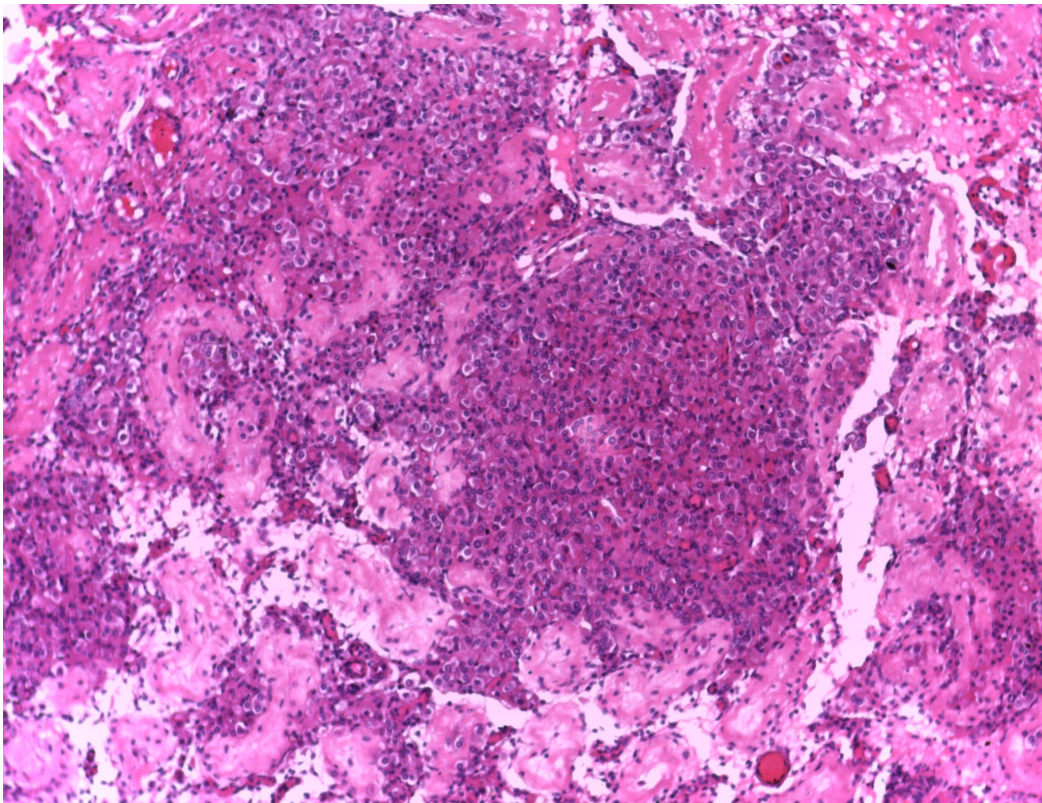
P 4-17. Lung cystic fibrosis, gross picture. (courtesy to Pathologyoutlines.com)



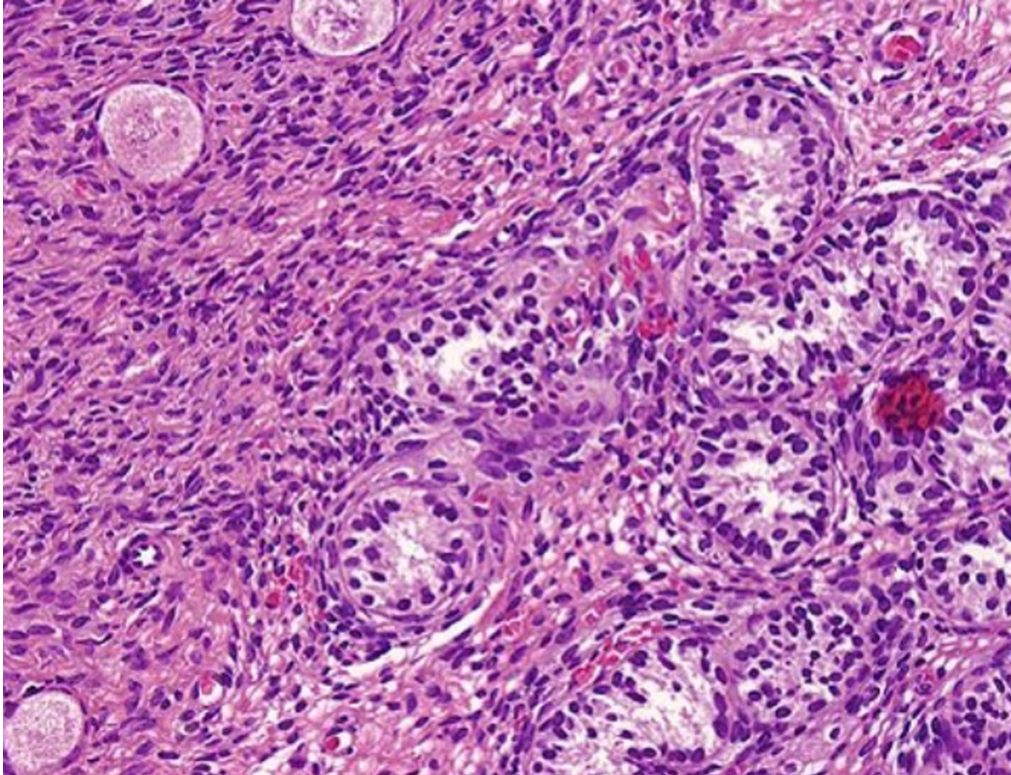
P 4-18. Lung cystic fibrosis. Enlarged bronchi with impacted mucus. The mucous is mixed with dense inflammation and cell debris "courtesy of PathologyOutlines.com".



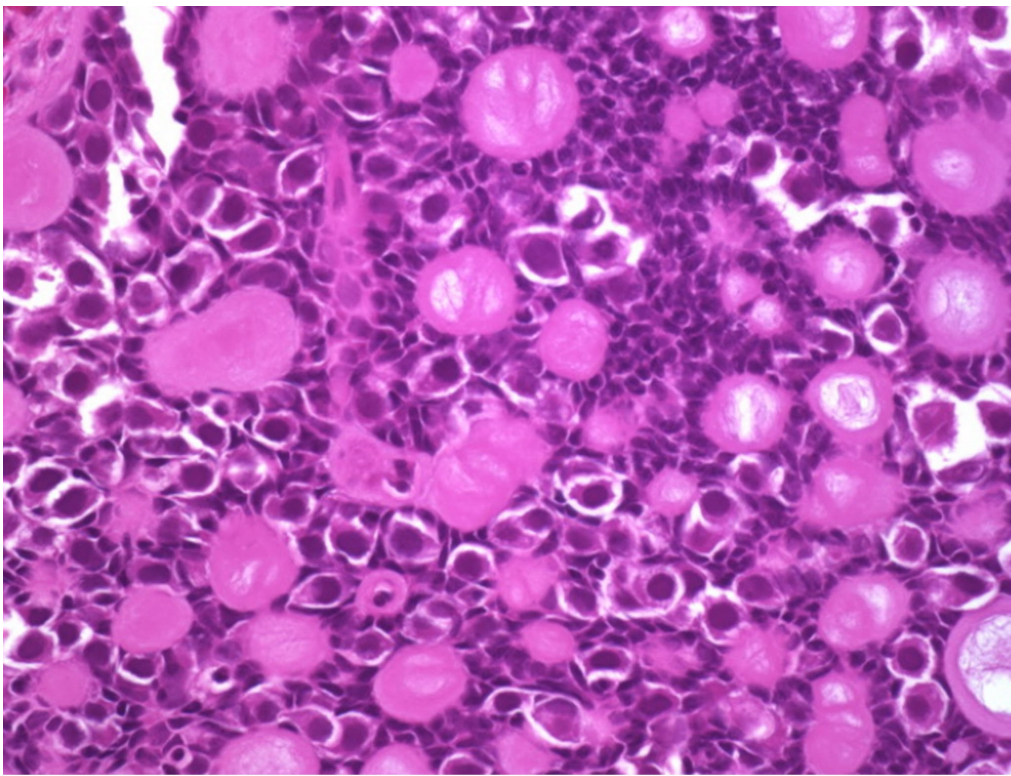
P 4-19. A streak gonad. It is composed of dense fibrous tissue with complete absence of germ cells or specialized sex cord stroma. Sex recognition is impossible.



P 4-20. Testicular biopsy, Klinefelter syndrome. There is tubular atrophy with sclerosis associated with hyperplastic Leydig cell nodules. Karyotyping is diagnostic (47 XXY)



P 4-21. Ovotestis. Note the presence of both testicular and ovarian tissue in the same gonad, primordial follicles (Left) and seminiferous tubules with immature sertoli cells (Right) "courtesy of PathologyOutlines.com".



P 4-22. Gonadoblastoma. Cellular nests of both malignant germ cells as well as sex cord cells. This tumor most commonly arises in males with disordered sex development "courtesy of PathologyOutlines.com".