

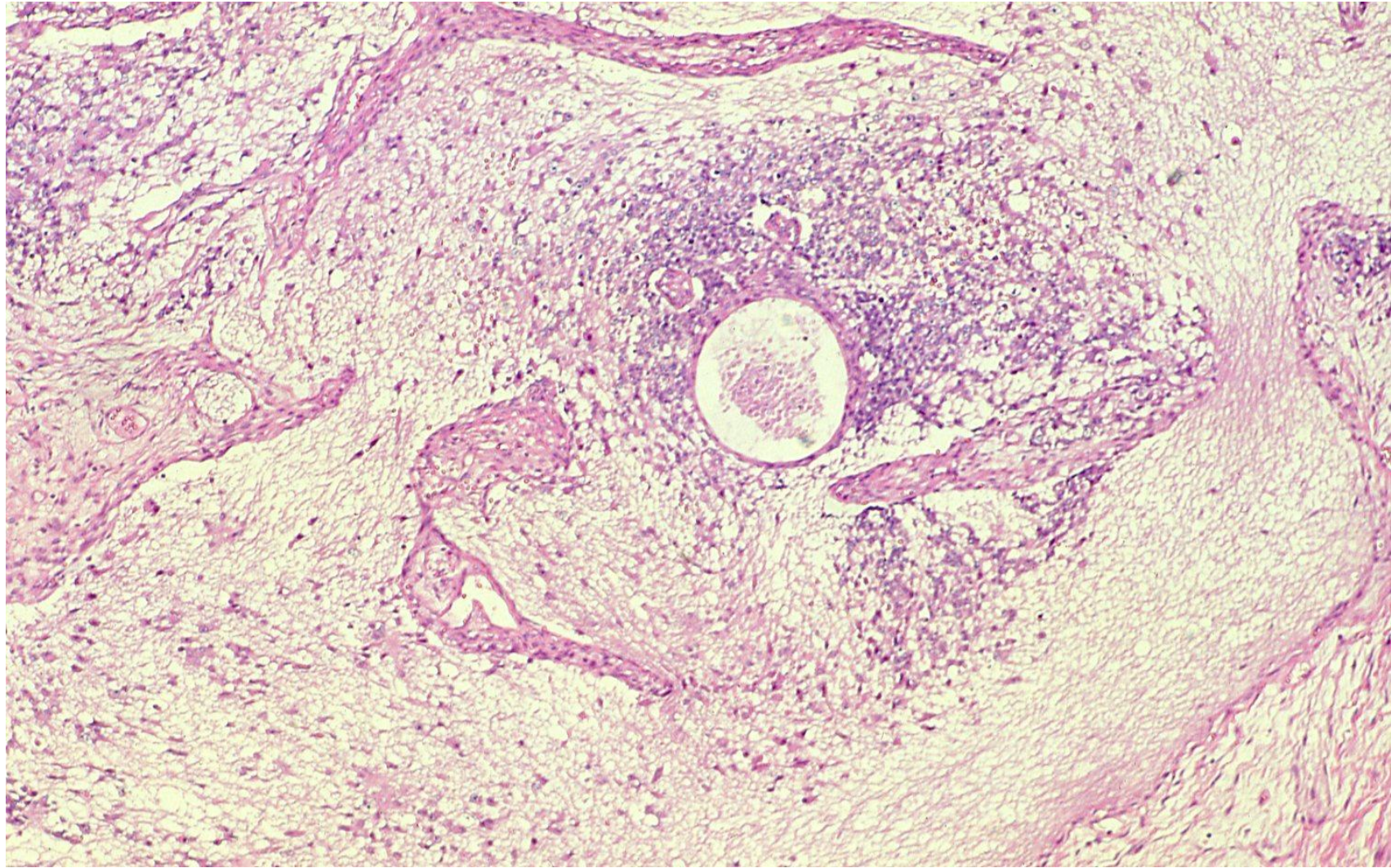
Malignant teratoma (teratocarcinosarcoma) of the paranasal cavity in an adult

Malignant teratoma (teratocarcinosarcoma) of the sinonasal cavity in an adult is an aggressive malignant neoplasm with male predominance microscopically featured by heterogenous morphology with the combination of both epithelial and mesenchymal components. It's unique that varying proportions of benign and malignant epithelial, mesenchymal, and neuroepithelial elements are observed. The epithelial component shows adenocarcinomatous and neuroepitheliomatous differentiation. The mesenchymal component includes spindled cells with osteosarcomatous, rhabdomyosarcomatous or rhabdoid differentiation.

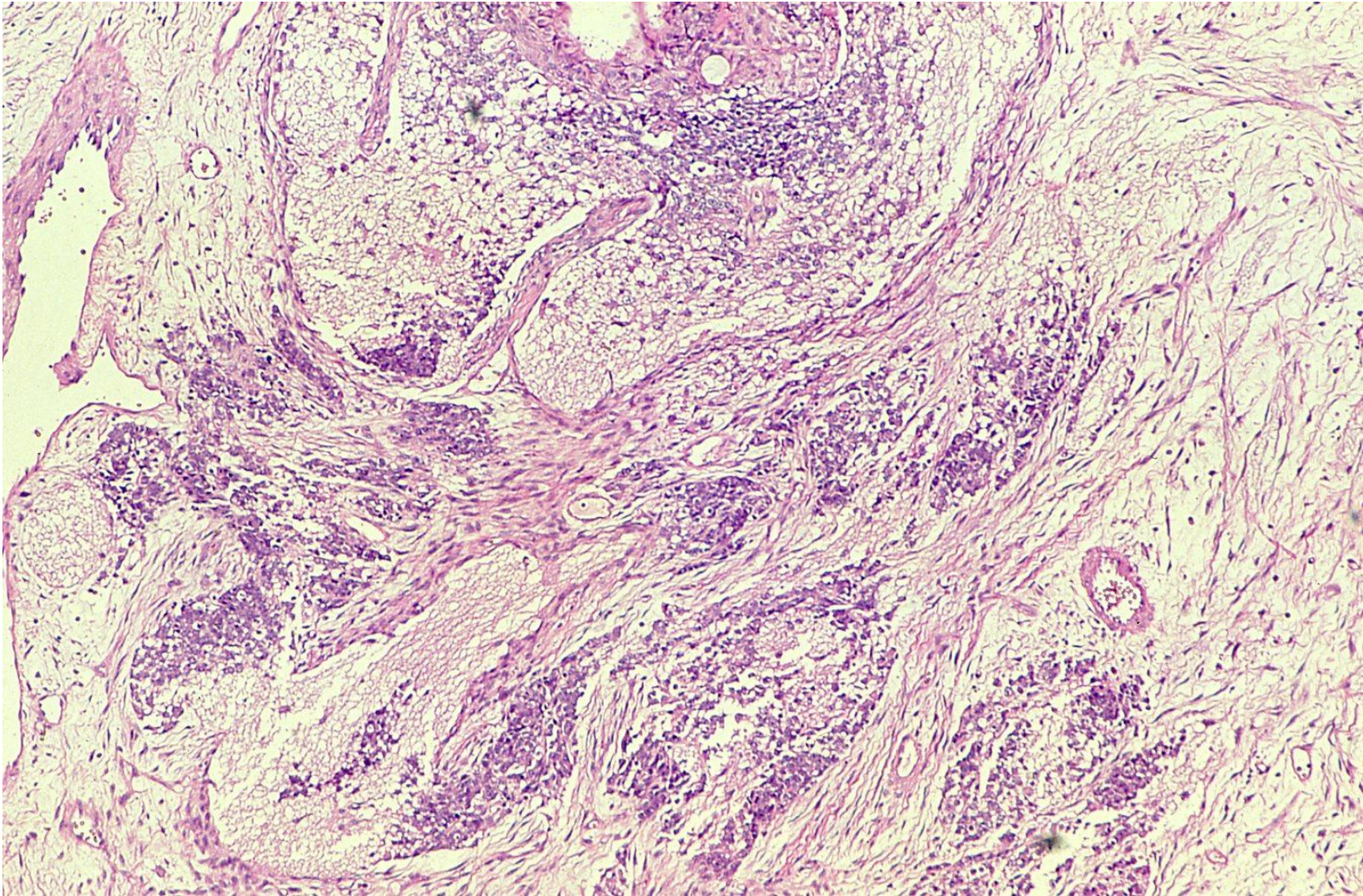
Ref.-1: Petrovich Z, et al. Malignant teratoma of the nasal cavity. J Surg Oncol 1977; 9(1): 21-28. doi: 10.1002/jso.2930090105

Ref.-2: Takasaki K, et al. A case with sinonasal teratocarcinosarcoma in the nasal cavity and ethmoid sinus. Eur Arch Otorhinolaryngol 2006; 263(6): 586-591. doi: 10.1007/s00405-006-0014-1

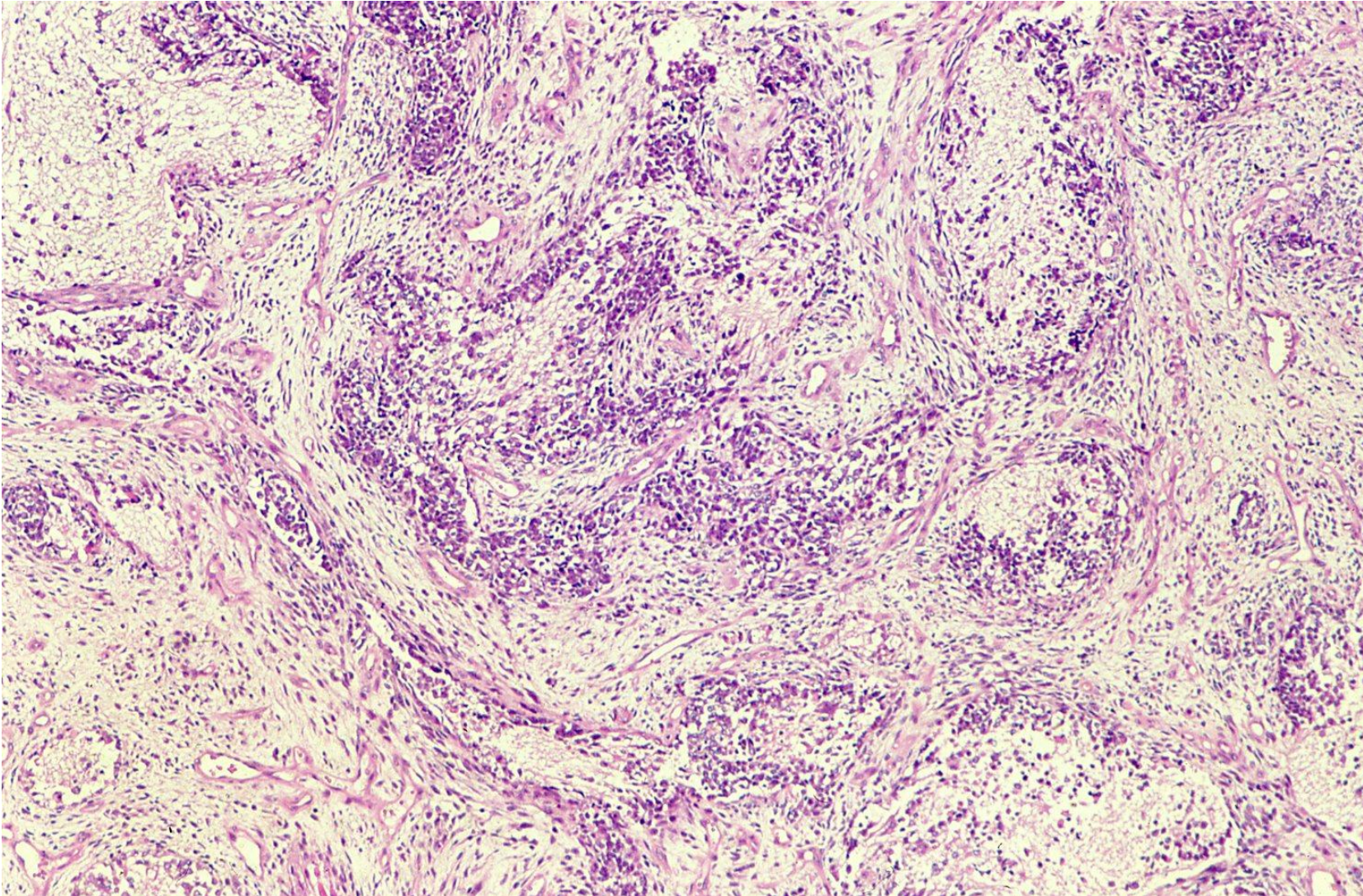
Ref.-3: Fatima S, et al. Sinonasal teratocarcinosarcoma: a clinicopathologic and immunohistochemical study of 6 cases. Ann Diagn Pathol 2013; 17(4): 313-318. doi: 10.1016/j.anndiagpath.2013.01.003



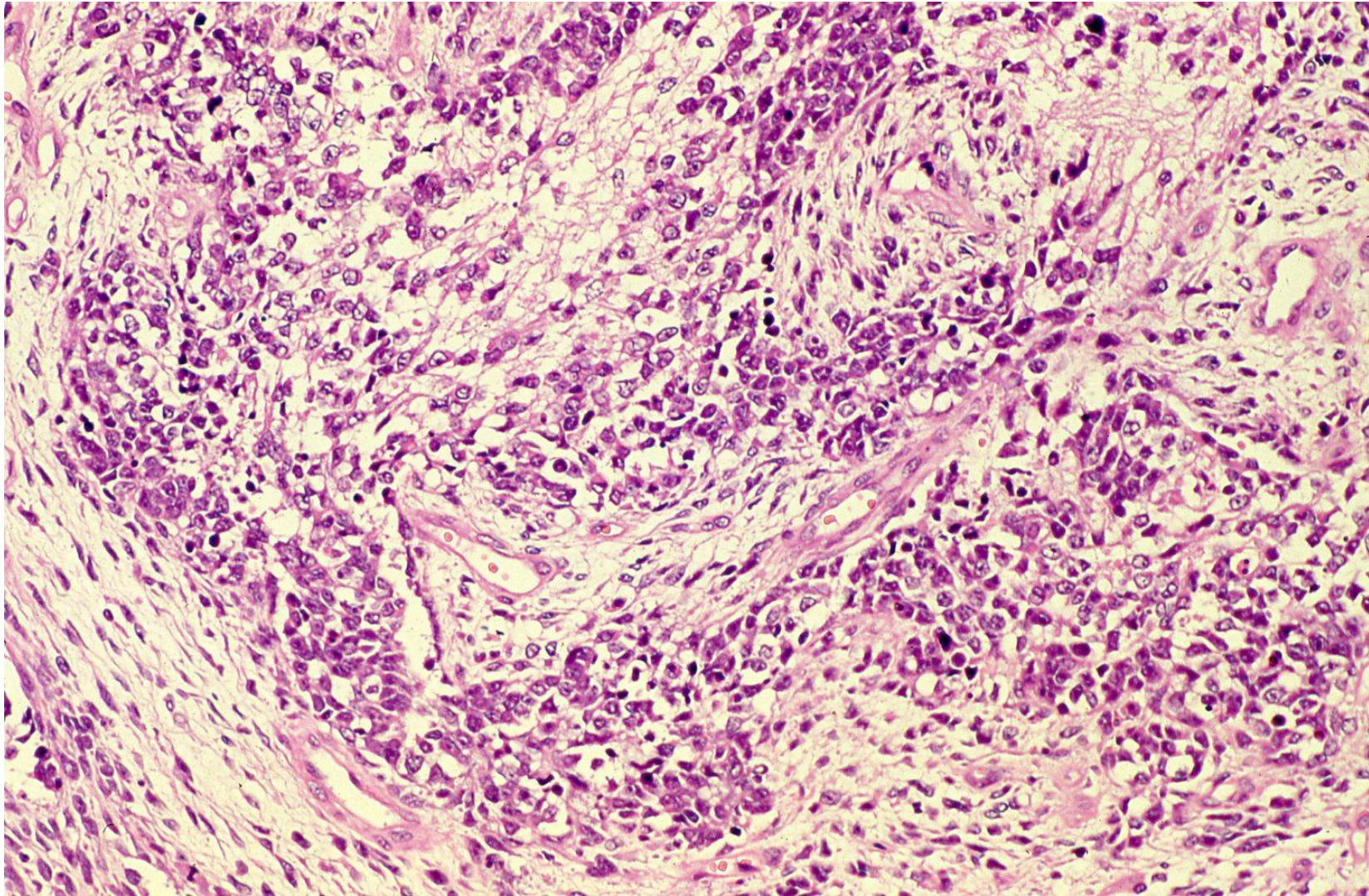
Malignant teratoma (teratocarcinosarcoma) of the ethmoid sinus seen in a 51 y-o male patient. In the background of neuropil-like neuronal component, epithelial and neuroepithelial components grow haphazardly (H&E-1).



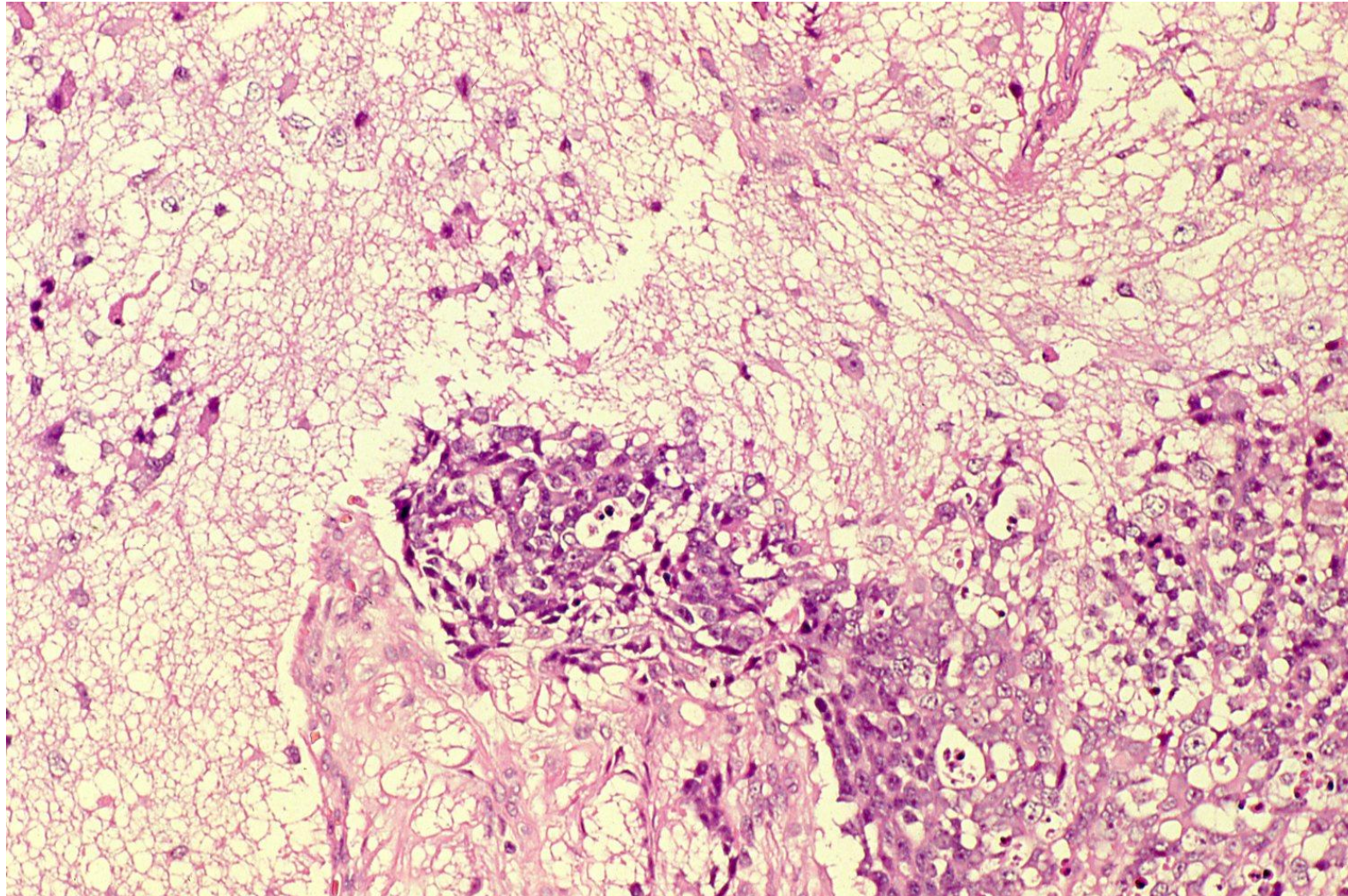
Malignant teratoma (teratocarcinosarcoma) of the ethmoid sinus seen in a 51 y-o male patient. In the background of neuropil-like neuronal component and spindled cells, neuroepithelial nests grow haphazardly (H&E-2).



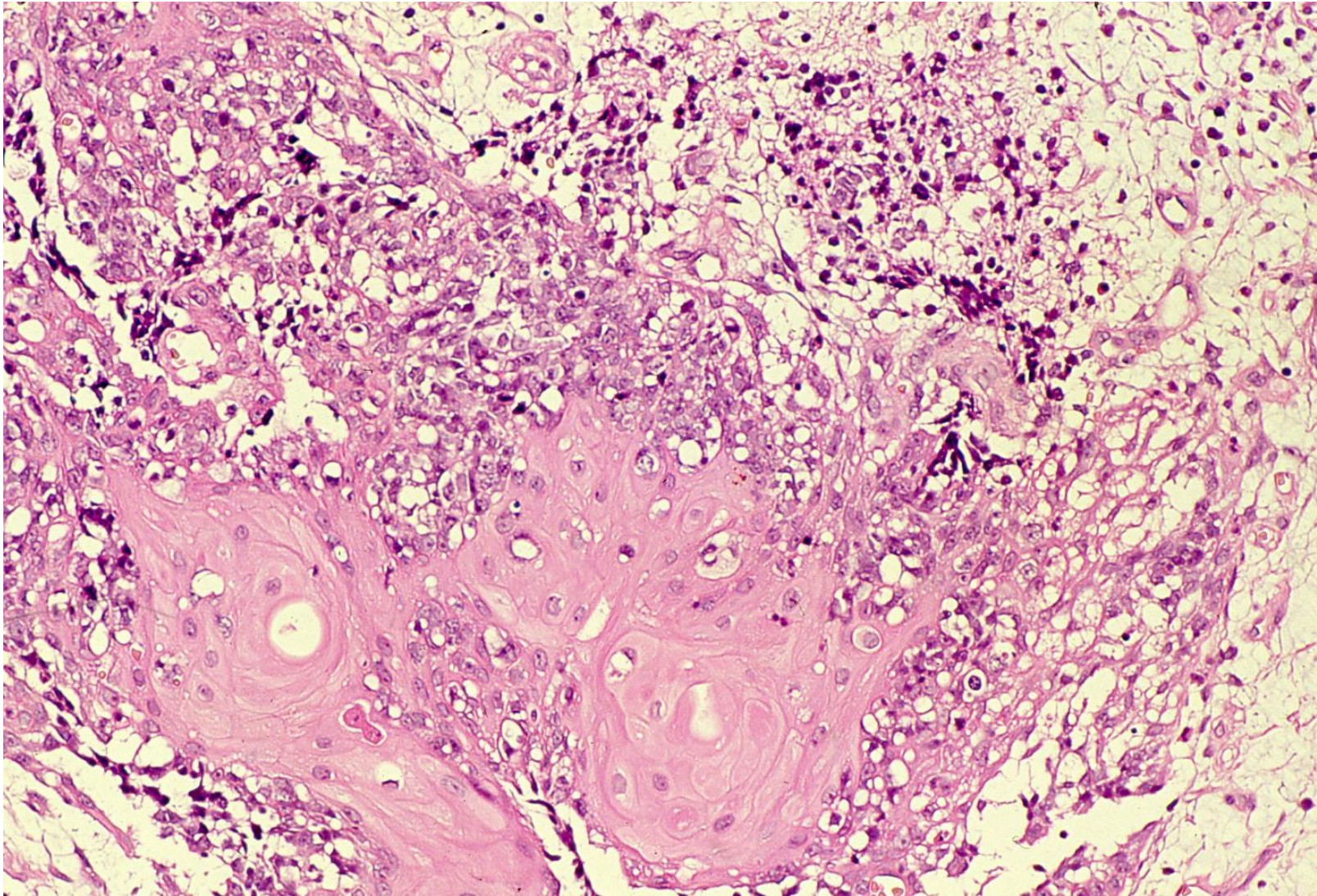
Malignant teratoma (teratocarcinosarcoma) of the ethmoid sinus seen in a 51 y-o male patient. Neuroepithelial cells grow in the background of neuropil-like myxoid and spindled components (H&E-3).



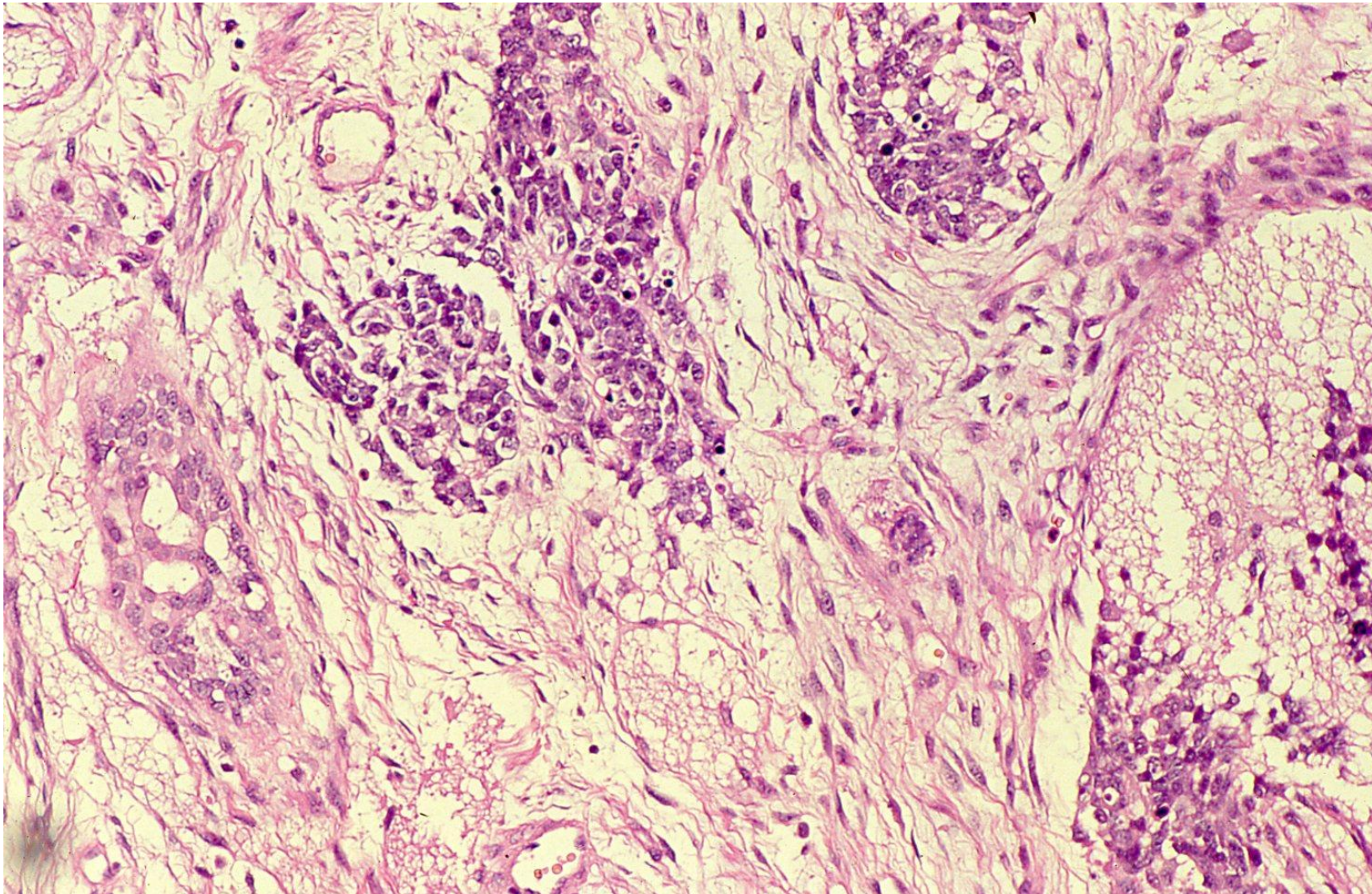
Malignant teratoma (teratocarcinosarcoma) of the ethmoid sinus seen in a 51 y-o male patient. Neuroepithelial cells with hyperchromasia grow in the background of neuropil-like myxoid and spindled components (H&E-4).



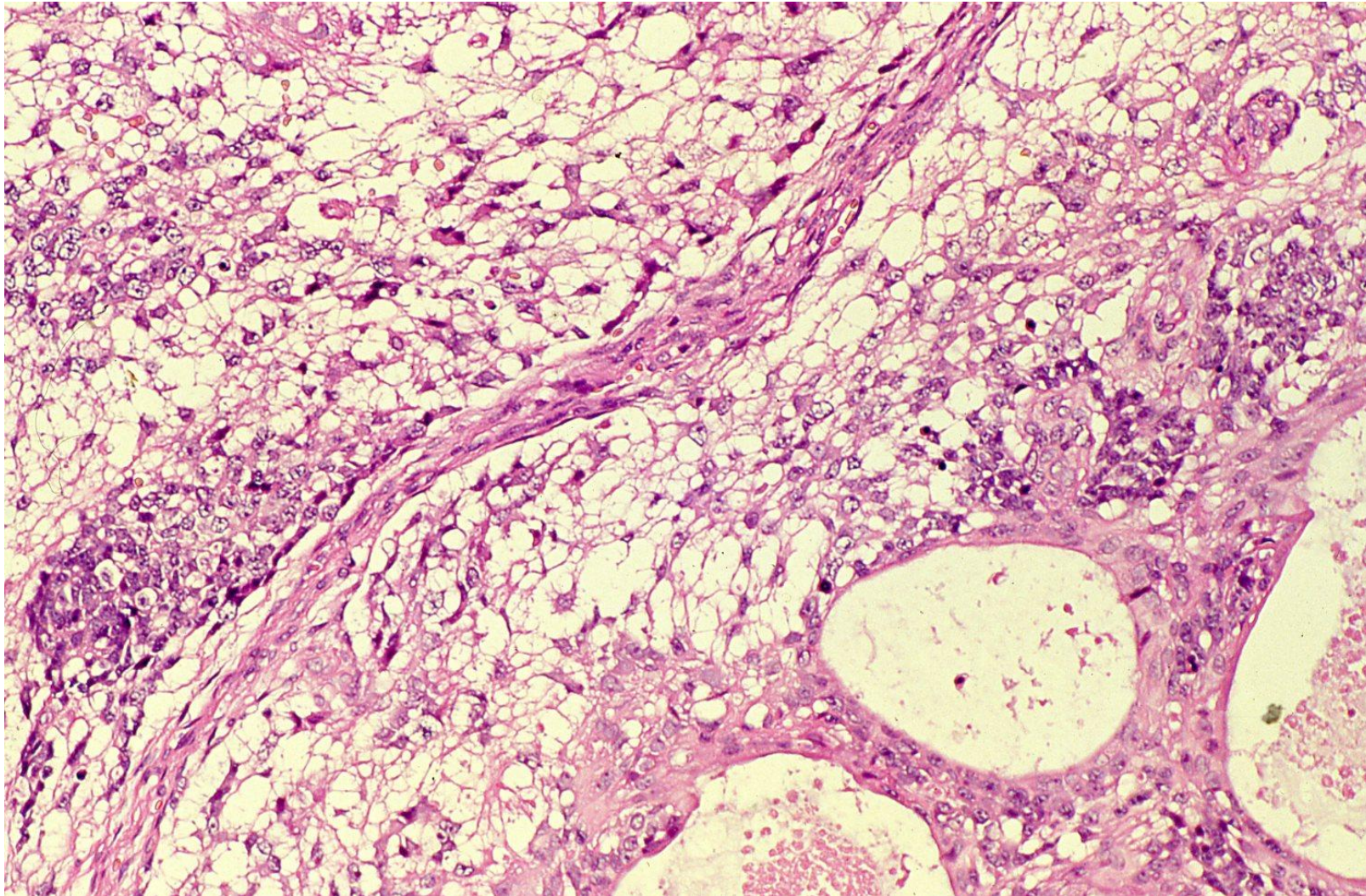
Malignant teratoma (teratocarcinosarcoma) of the ethmoid sinus seen in a 51 y-o male patient. Atypical neuroepithelial cells and epithelial cells with plump eosinophilic cytoplasm grow in the background of neuropil-like myxoid and spindled components (H&E-5).



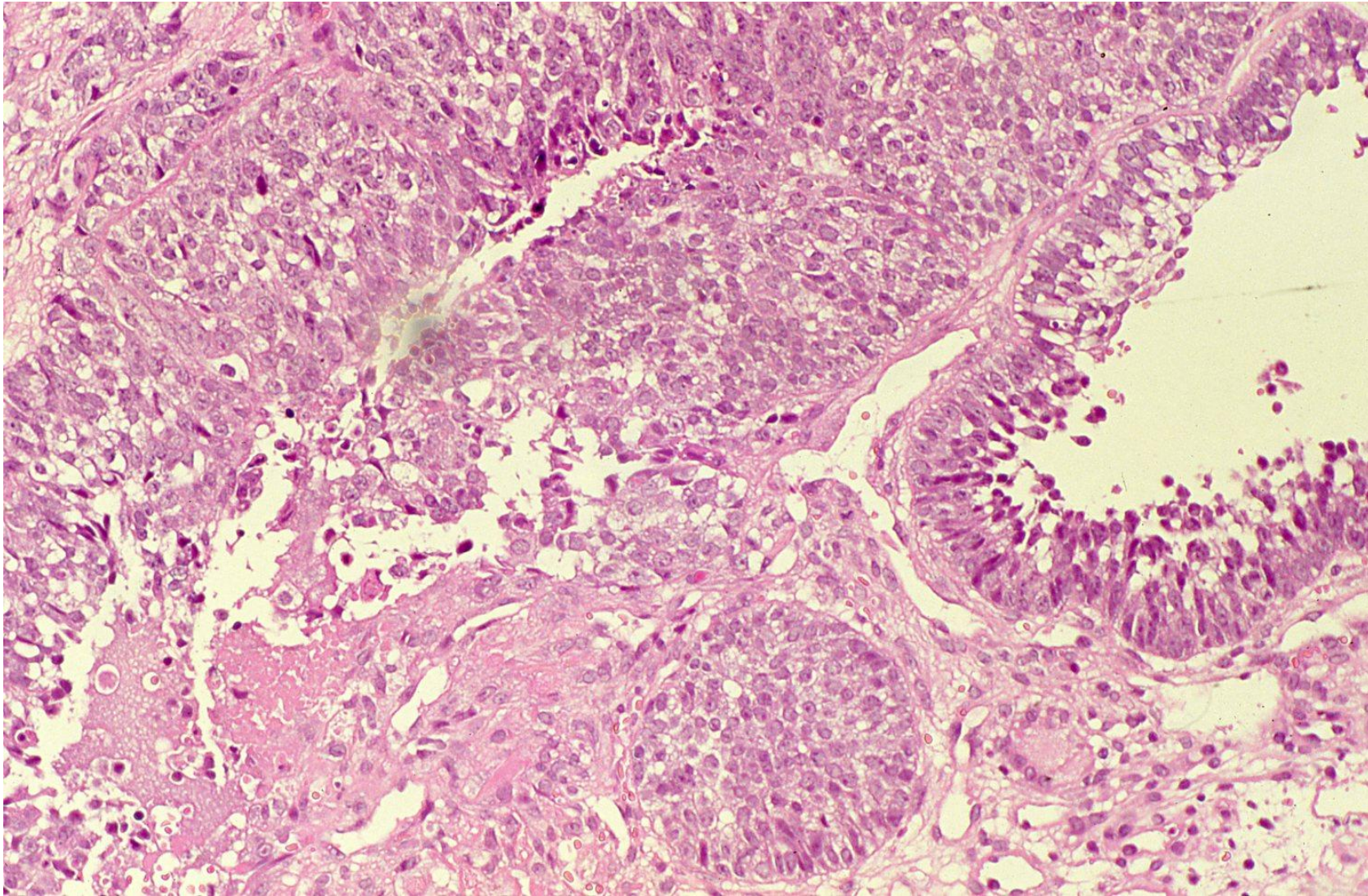
Malignant teratoma (teratocarcinosarcoma) of the ethmoid sinus seen in a 51 y-o male patient. Squamous cell component without atypia (squamous metaplasia) is surrounded by the neuroepithelial cells (H&E-6).



Malignant teratoma (teratocarcinosarcoma) of the ethmoid sinus seen in a 51 y-o male patient. In addition to the neuroepithelial cell nests, an epithelial cell nest reveals glandular differentiation (H&E-7).



Malignant teratoma (teratocarcinosarcoma) of the ethmoid sinus seen in a 51 y-o male patient. In addition to the neuroepithelial cell nests, epithelial cell nests reveal glandular differentiation with luminal dilatation (H&E-8).



Malignant teratoma (teratocarcinosarcoma) of the ethmoid sinus seen in a 51 y-o male patient. Adjacent to the stratified columnar cell component, solid epithelial nest with squamoid differentiation is observed (H&E-9).