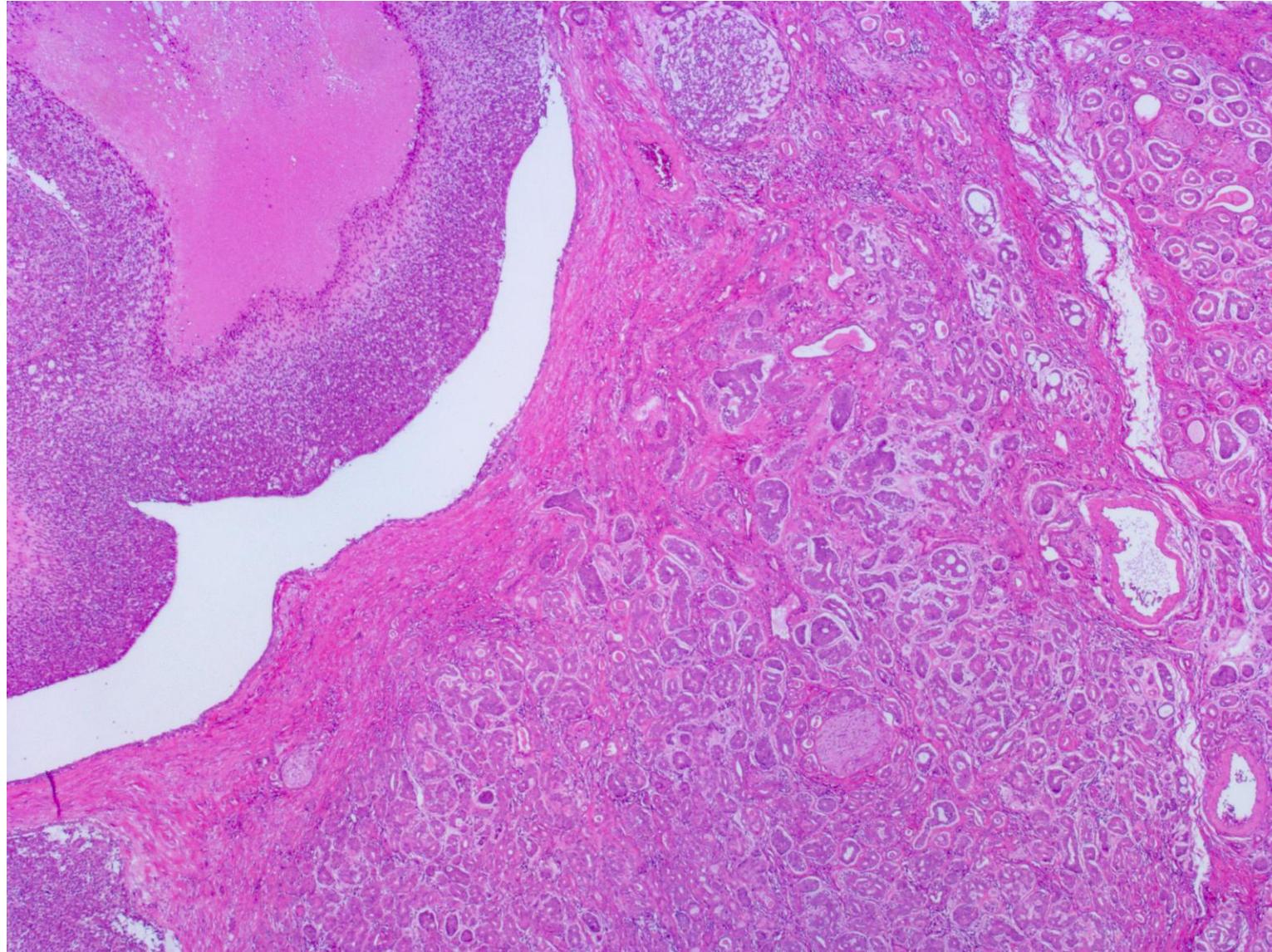


Adenoid cystic carcinoma of the oral floor

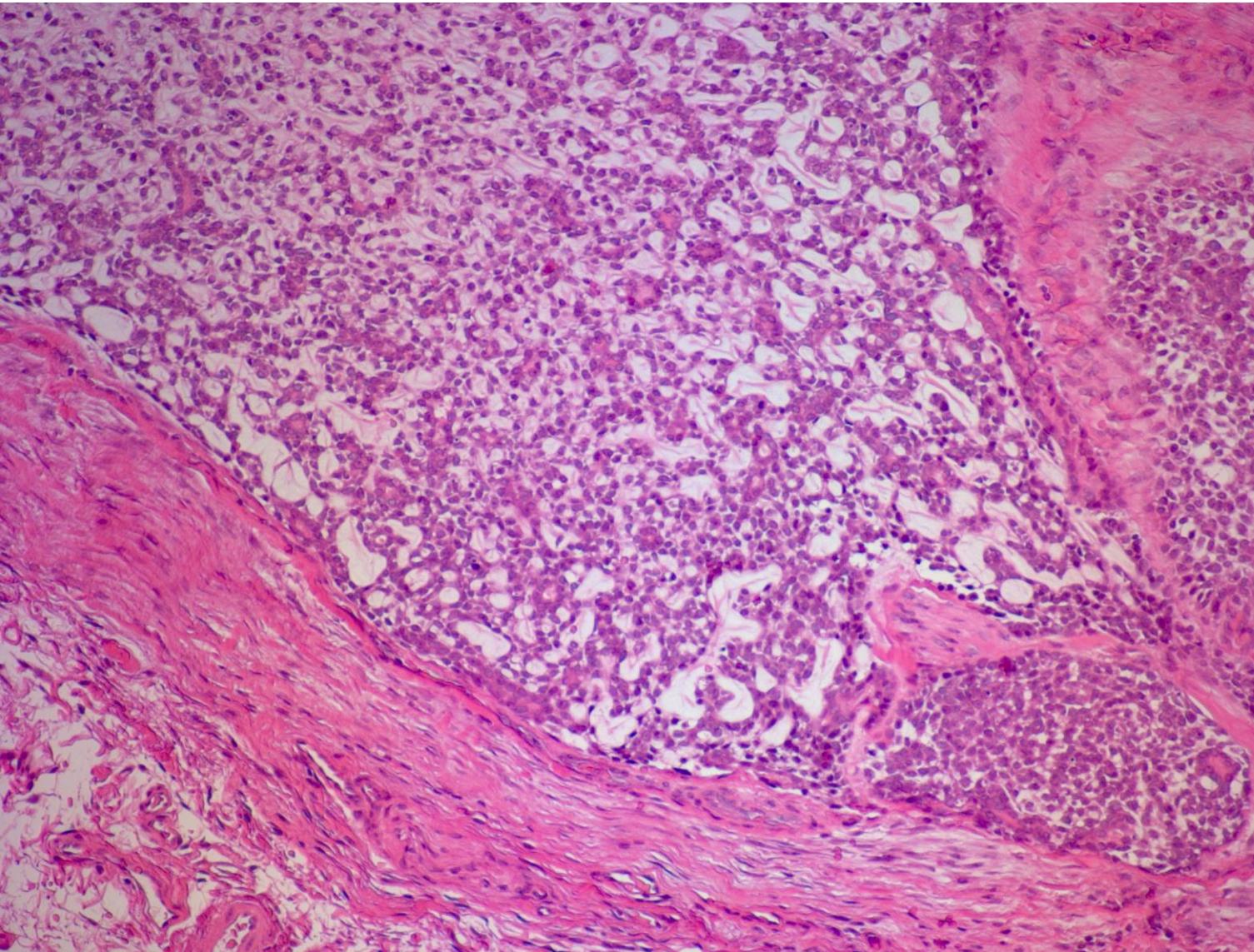
Adenoid cystic carcinoma, first described as “cylindroma”, is a representative salivary gland tumor. Half of the tumors occur in minor salivary glands other than the major salivary glands, including the hard palate, tongue and oral floor. Adenoid cystic carcinoma is a slowly growing but highly invasive cancer with high recurrence rate in 10 years after surgery. Perineural and hematogenous spreads often occur in the long clinical course of the disease. Microscopically, the tumor is principally composed of myoepithelial cells with cribriform, tubular and/or solid structures. Formation of myxoid matrix is characteristic.

Light and electron microscopic features of adenoid cystic carcinoma of oral floor origin seen in a 53 y-o female patient are presented herein.

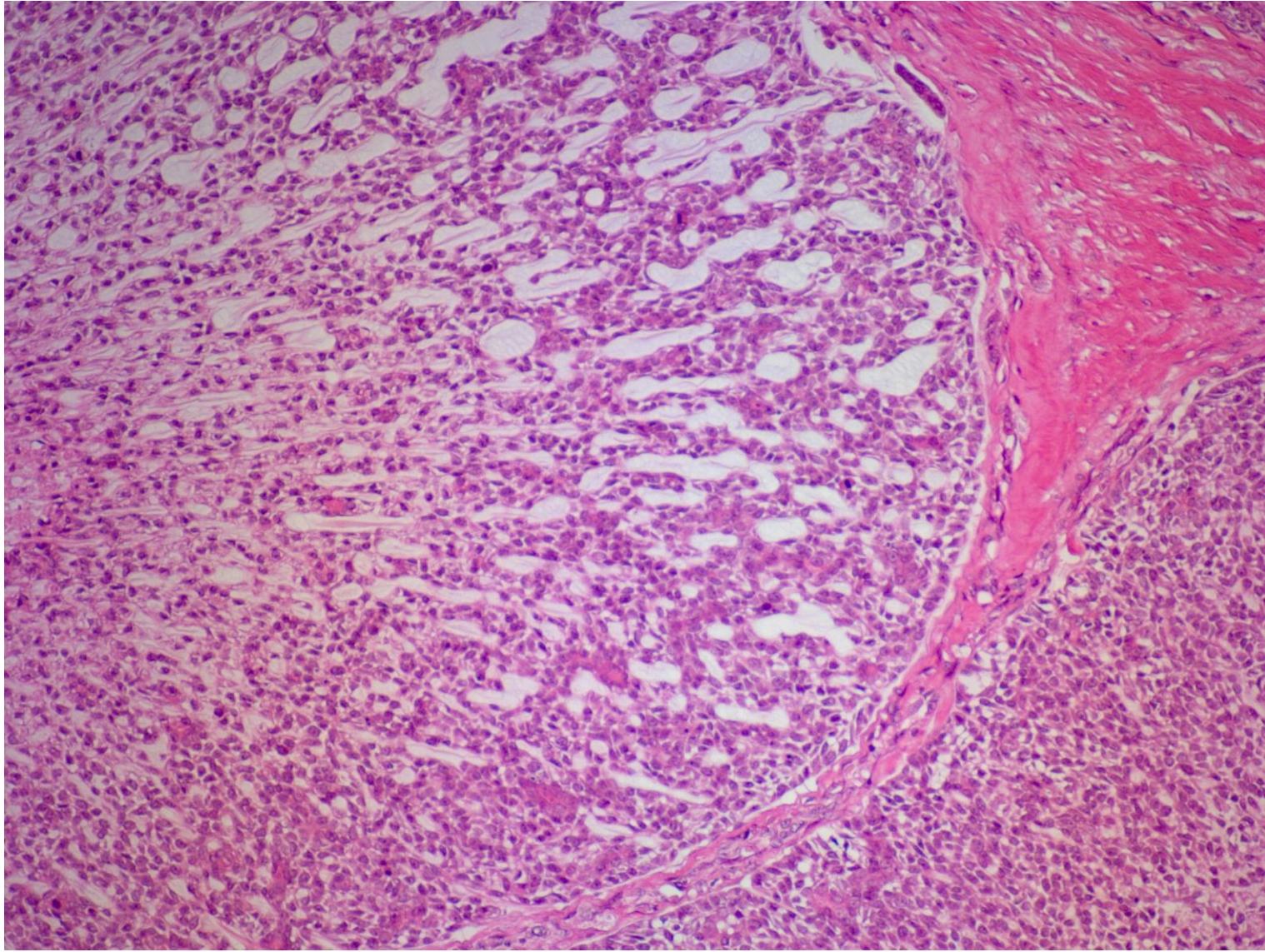
Ref. Gondivkar SM, et al. Adenoid cystic carcinoma: a rare clinical entity and literature review. *Oral Oncol* 2011; 47(4): 231-236. doi: 10.1016/j.oraloncology.2011.01.009



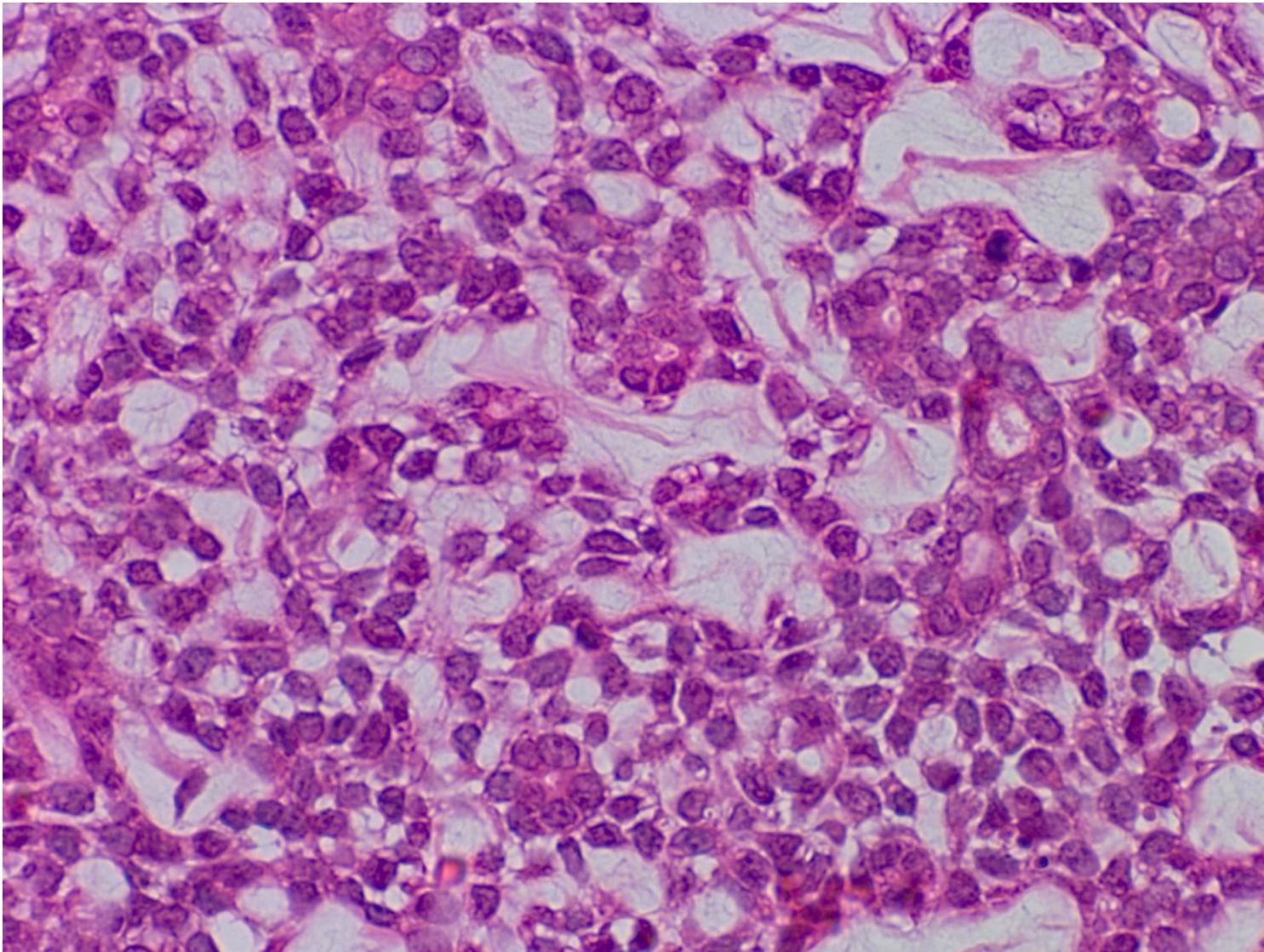
Adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. Invasive cancer cells with small nest formation accompanies focal necrosis. Artificial slit-like spaces are formed (H&E-1).



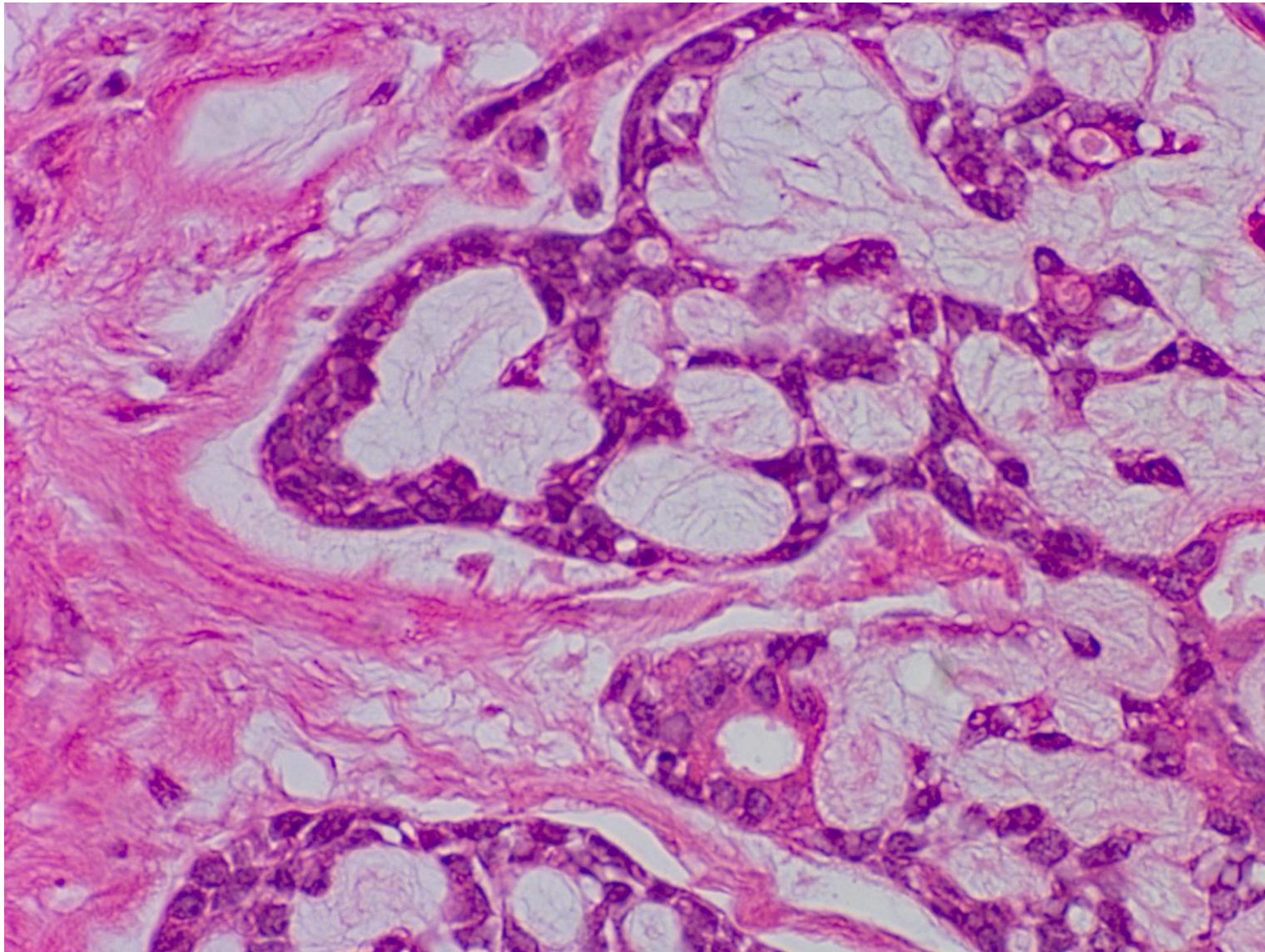
Adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. Invasive cancer cells with a cribriforming arrangement are embedded in the fibrotic stroma (H&E-2).



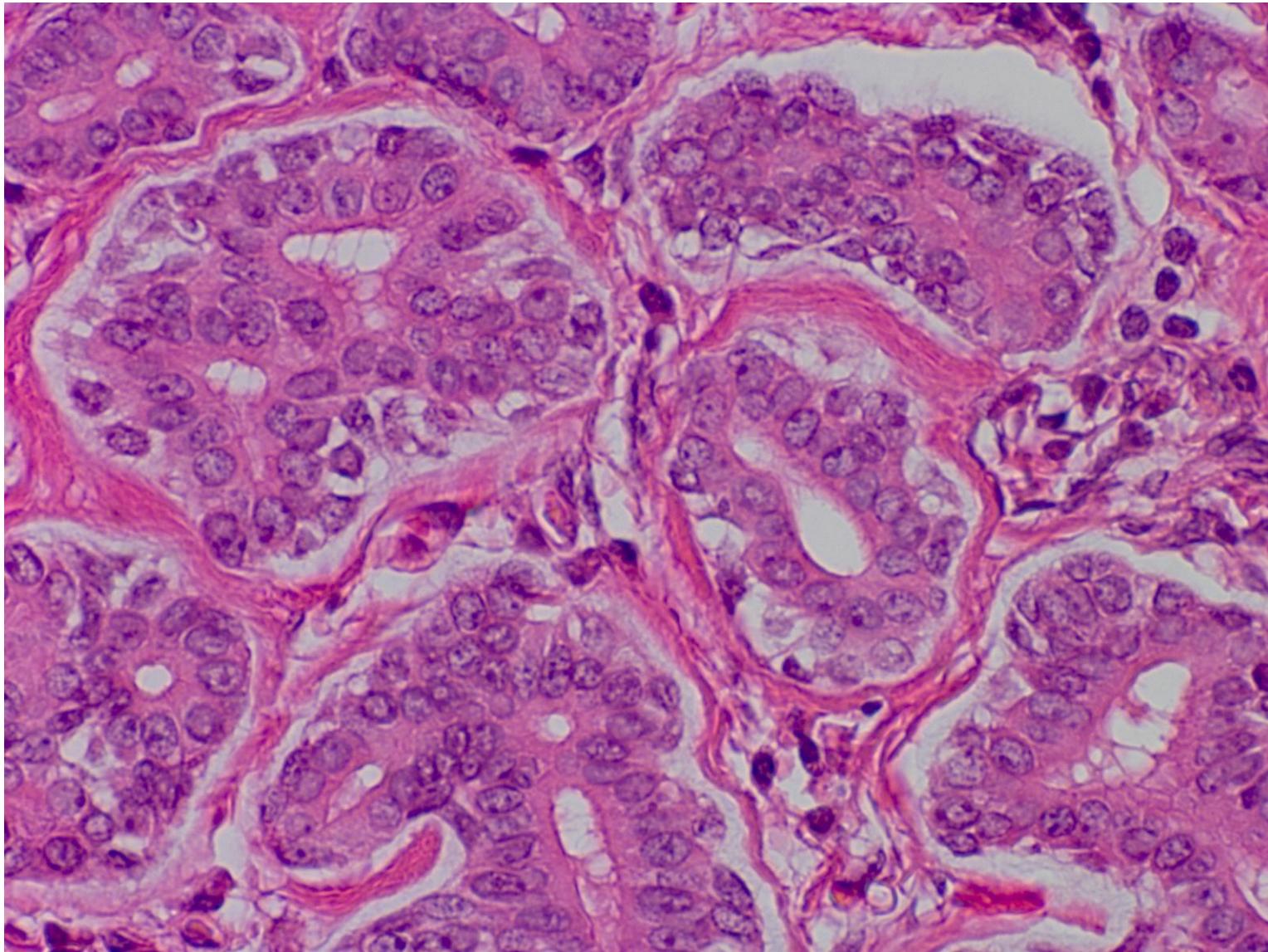
Adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. Invasive cancer cells with cribriforming and solid arrangements are embedded in the fibrotic stroma (H&E-3).



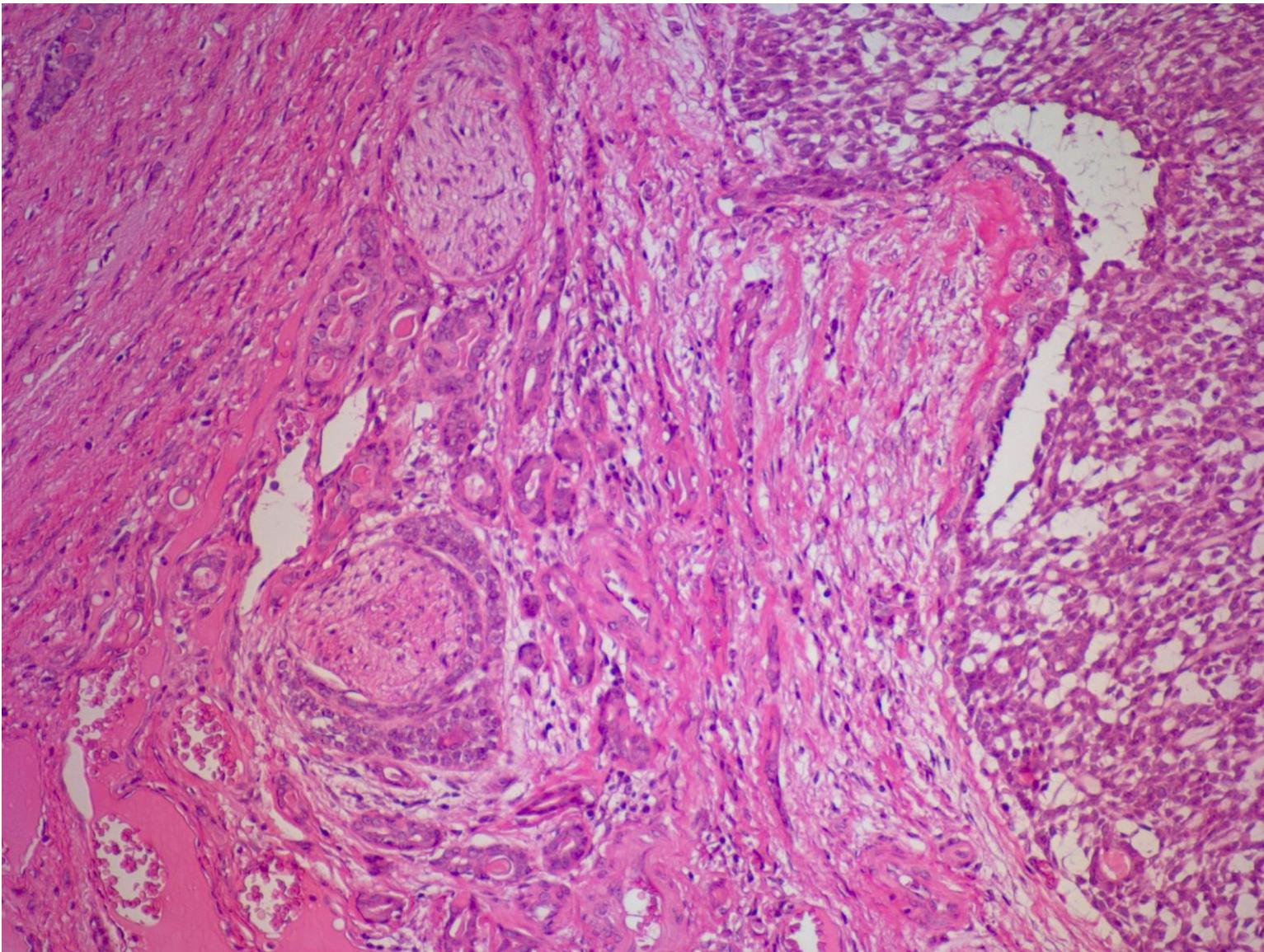
Adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. Small-sized cancer cells invade with a myxoid matrix. True glandular spaces are scattered (H&E-4).



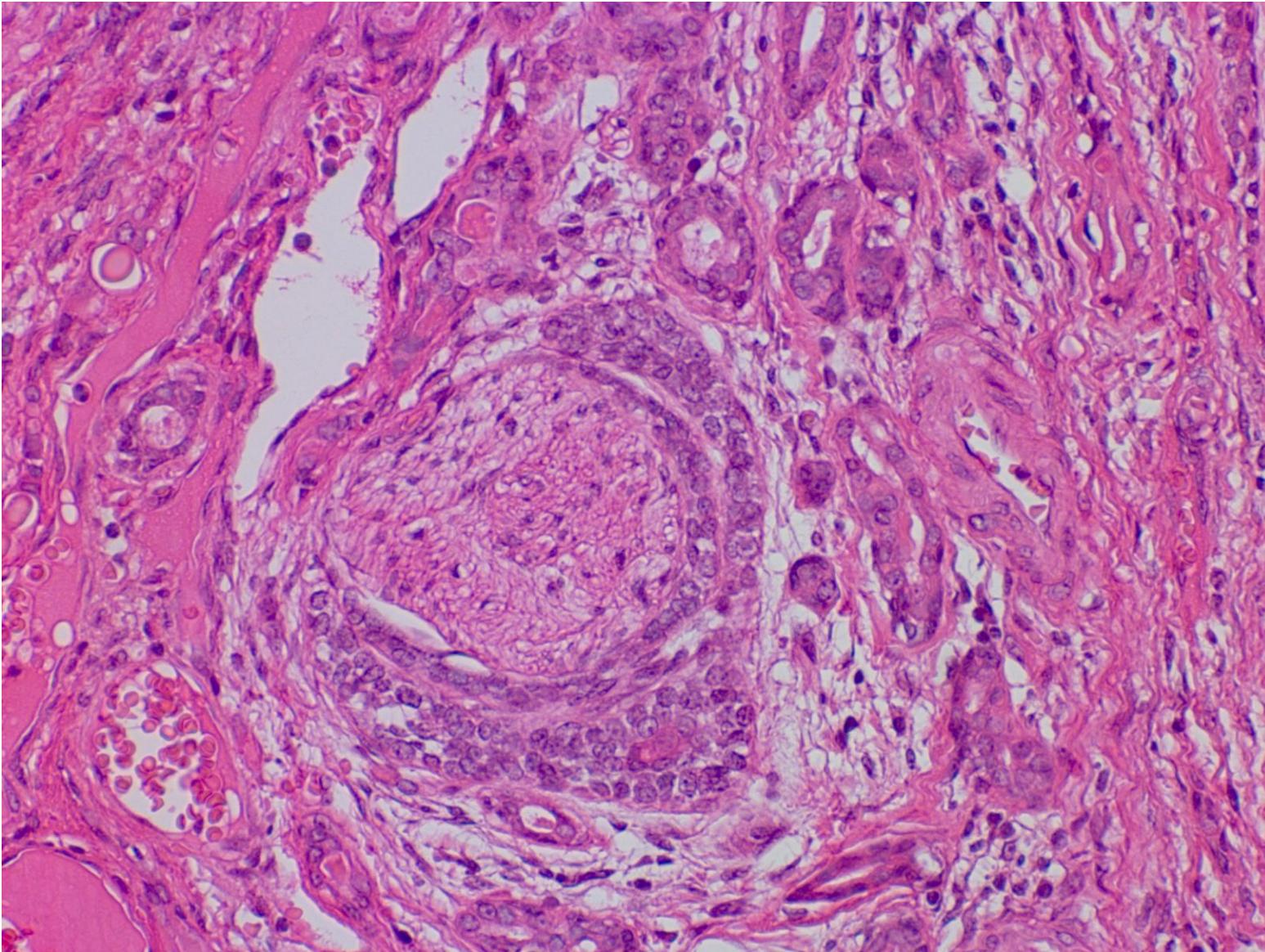
Adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. Small-sized cancer cells invade with a myxoid matrix. True glandular spaces are focally observed (H&E-5).



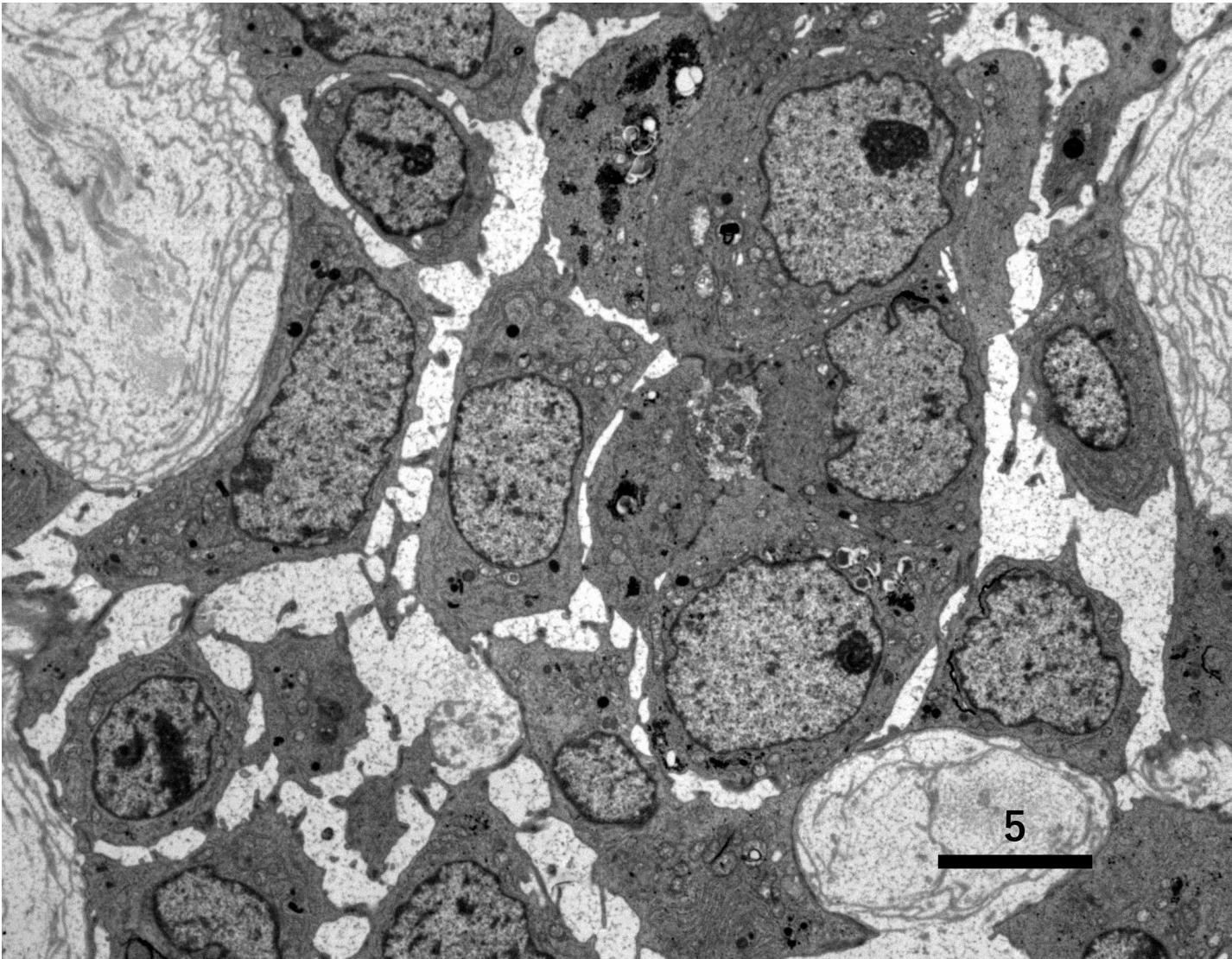
Adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. The cancer cells form distinct two layers: inner true glandular cells and outer myoepithelial cells with clear cytoplasm (H&E-6).



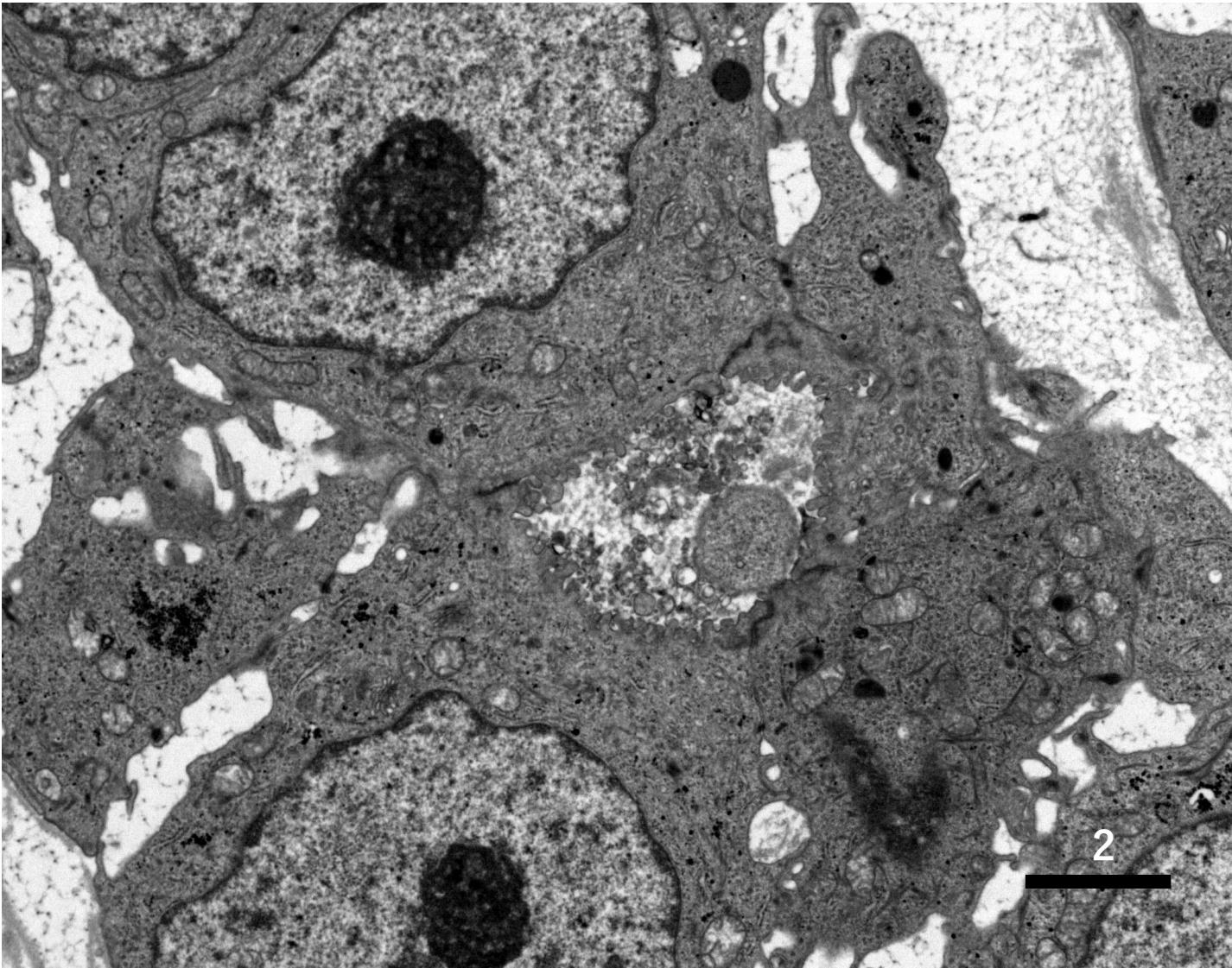
Adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. Invasive small-sized cancer cells involve a peripheral (H&E-7).



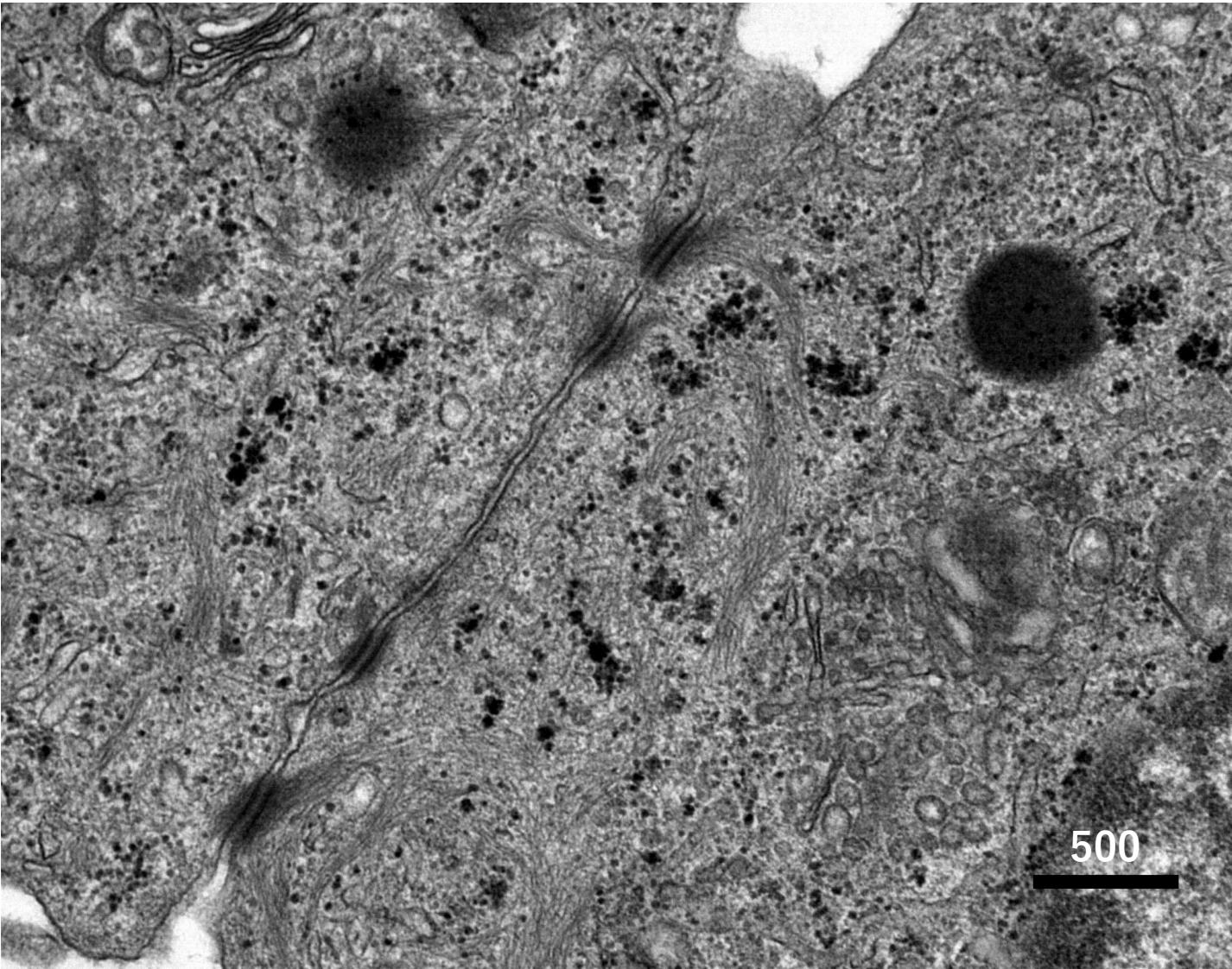
Adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. Invasive small-sized cancer cells involve a peripheral (H&E-8).



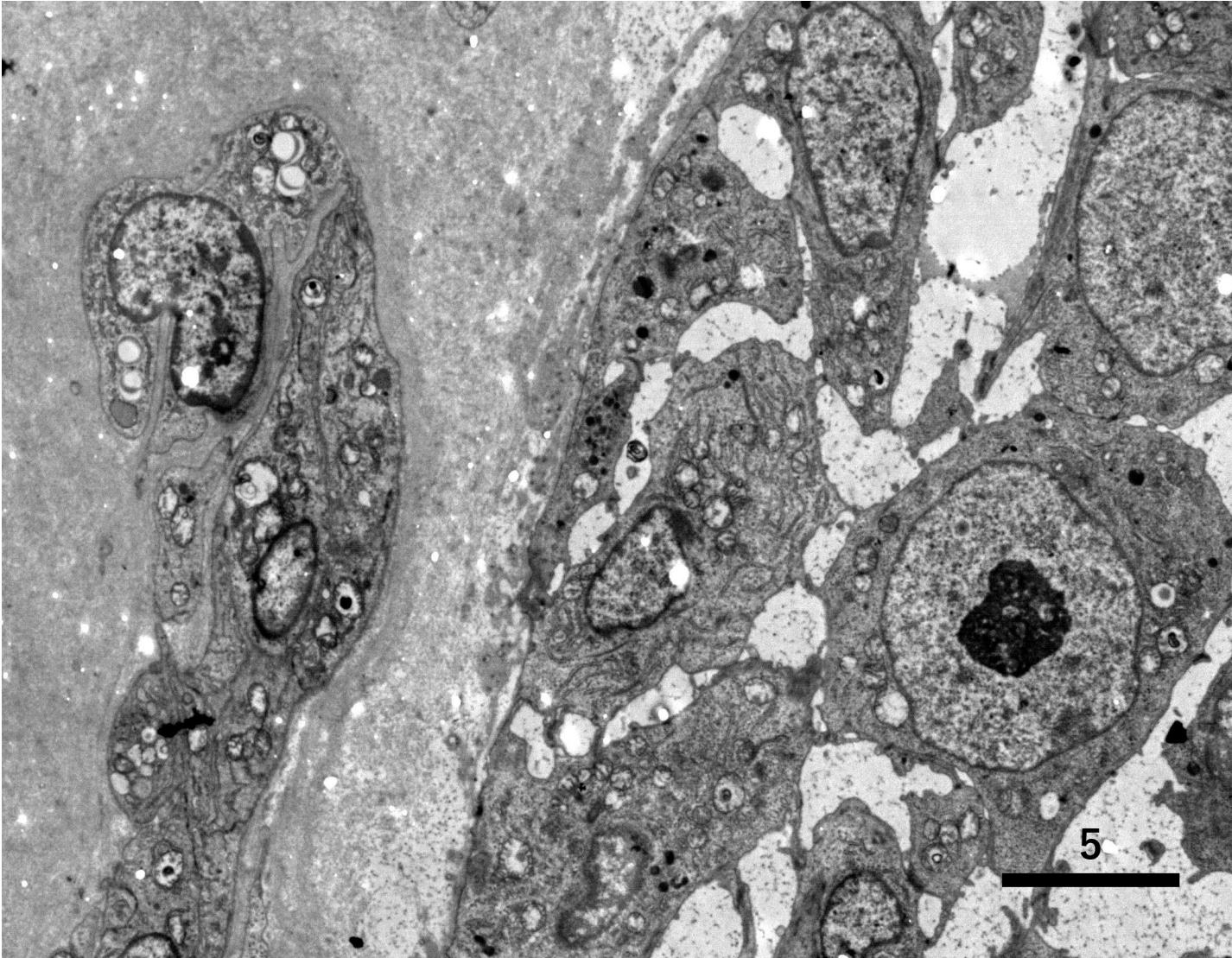
Ultrastructure of adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. The cancer cells with fine cellular processes are surrounded by myxoid matrix. The nuclei possess dispersed euchromatin and a prominent nucleolus (TEM-1).



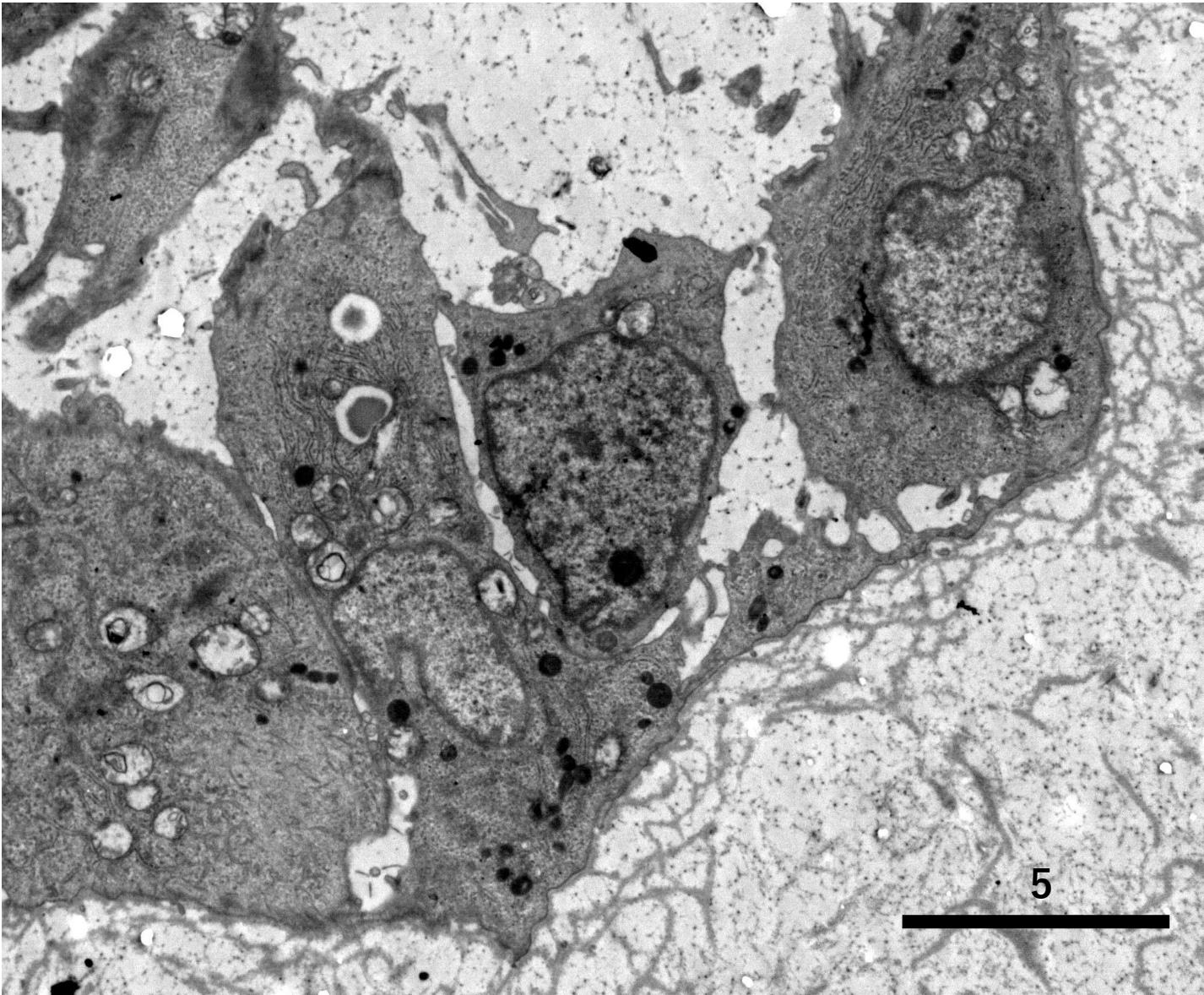
Ultrastructure of adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. The cancer cells are surrounded by myxoid matrix. The nucleoli are prominent in euchromatin-rich nucleoplasm (TEM-2).



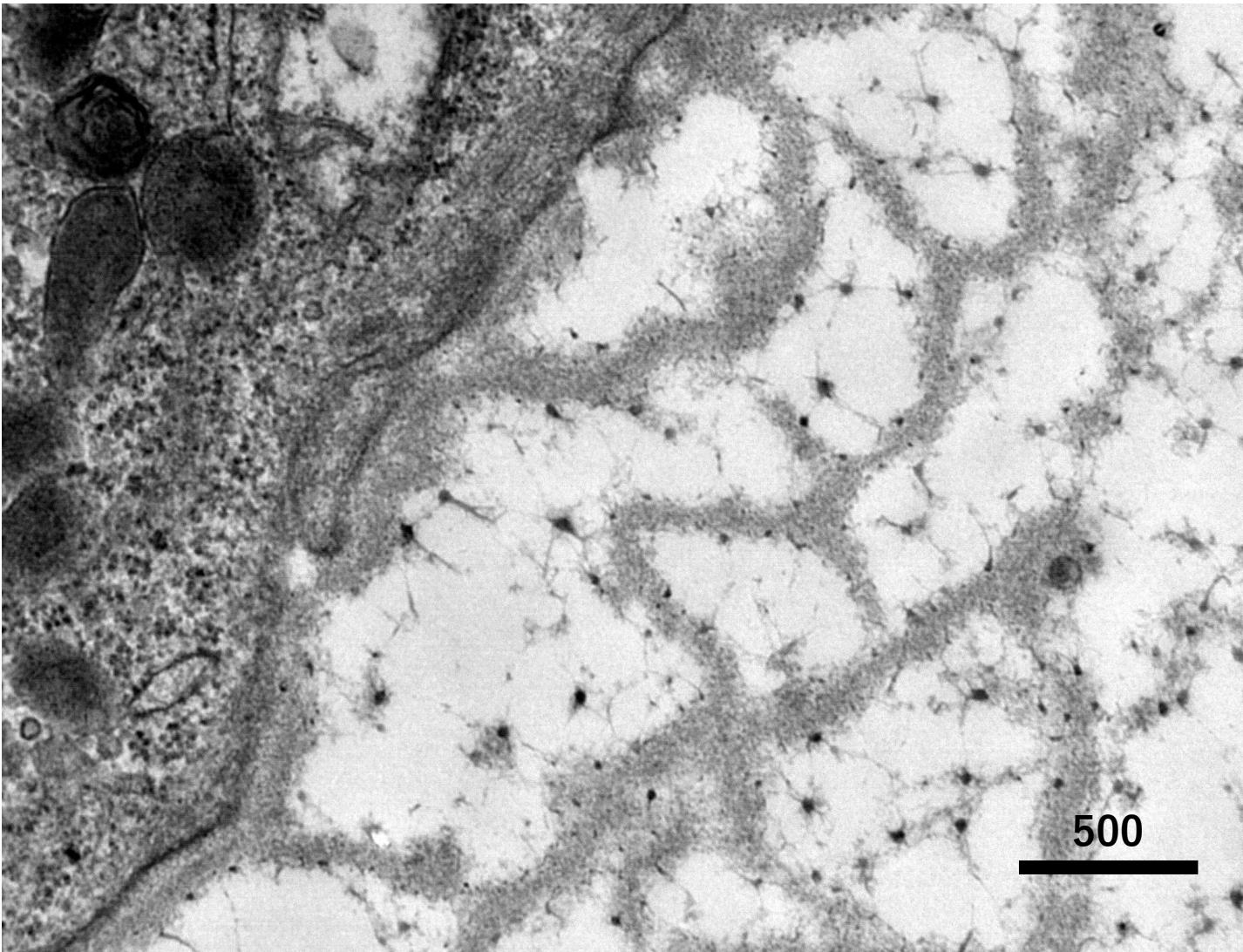
Ultrastructure of adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. The cancer cells are rich in intermediate filaments, and lysosomal granules are scattered. Desmosomal attachments are well developed (TEM-3).



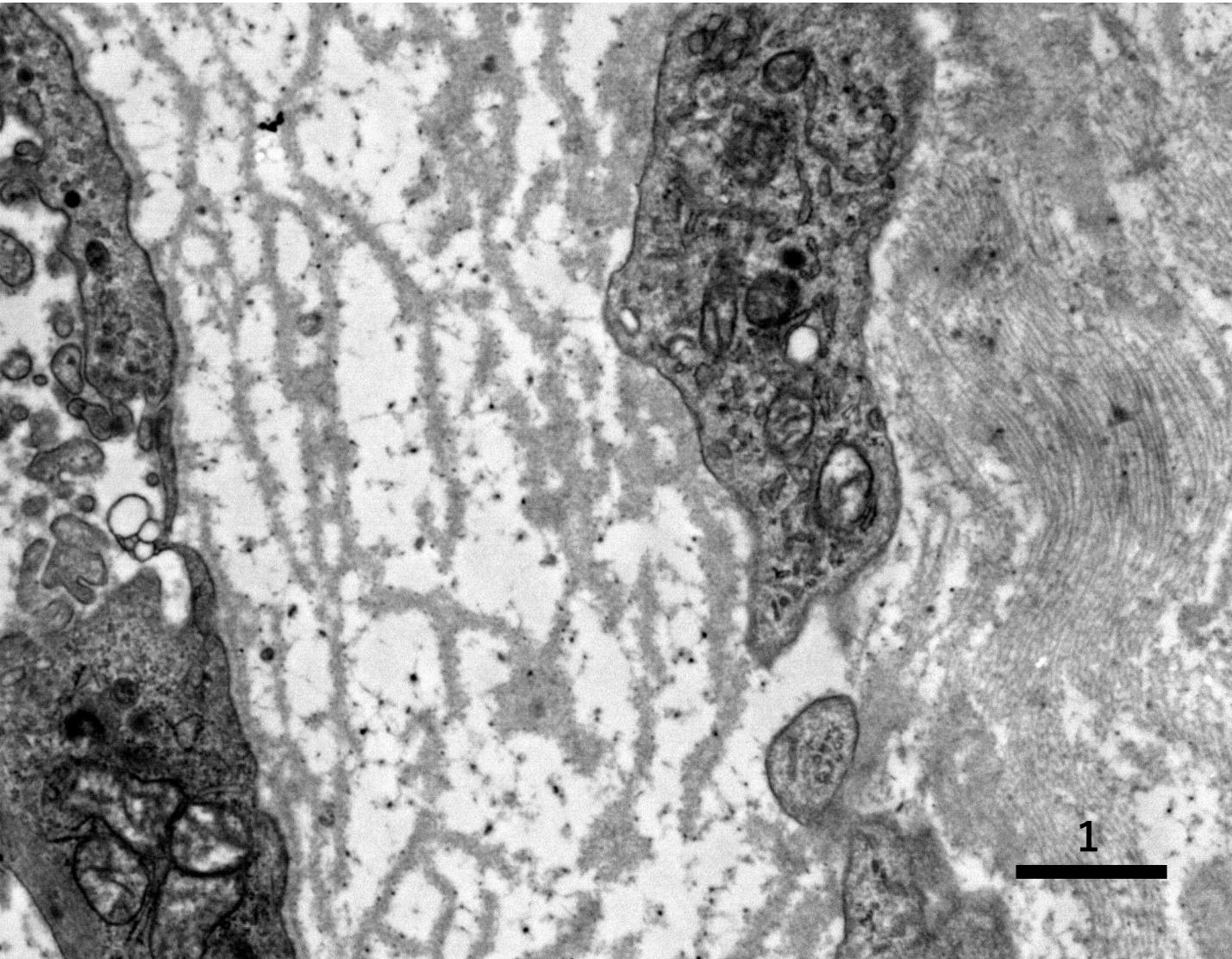
Ultrastructure of adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. The cancer cells with fine cellular processes are embedded in the myxoid matrix. Desmosomal junctions are seen between the cells (TEM-4).



Ultrastructure of adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. The clustered cancer cells with fine cellular processes are embedded in the characteristic myxoid matrix (TEM-5).



Ultrastructure of adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. The clustered cancer cells with fine cellular processes are embedded in the characteristic mesh-worked myxoid matrix with electron-dense dot-like structures (TEM-6).



Ultrastructure of adenoid cystic carcinoma of the oral floor seen in a 53 y-o female patient. The cancer cells are embedded in the characteristic mesh-worked myxoid matrix with electron-dense dot-like structures (TEM-6).