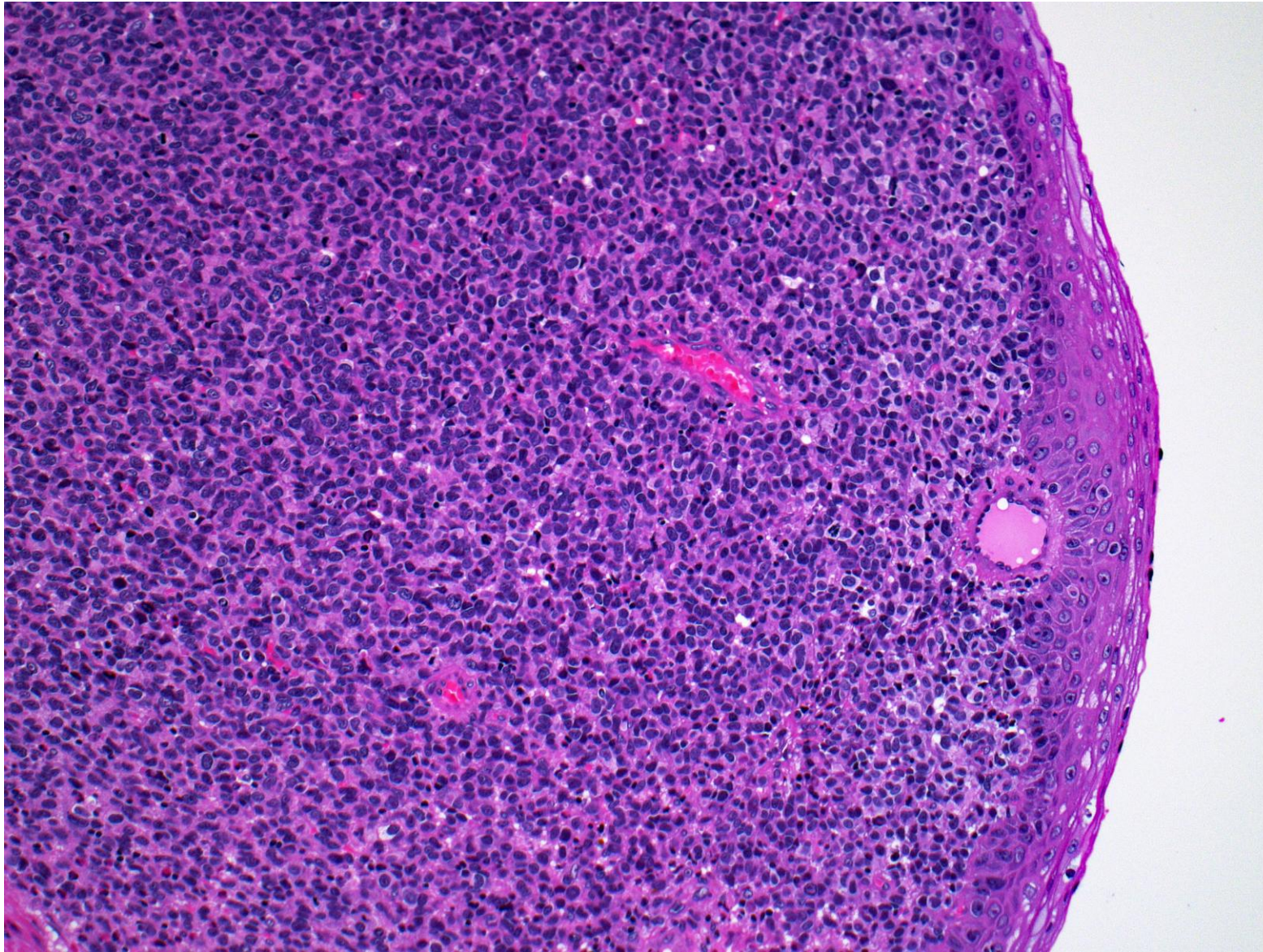


Amelanotic malignant melanoma of the anus, small cell type

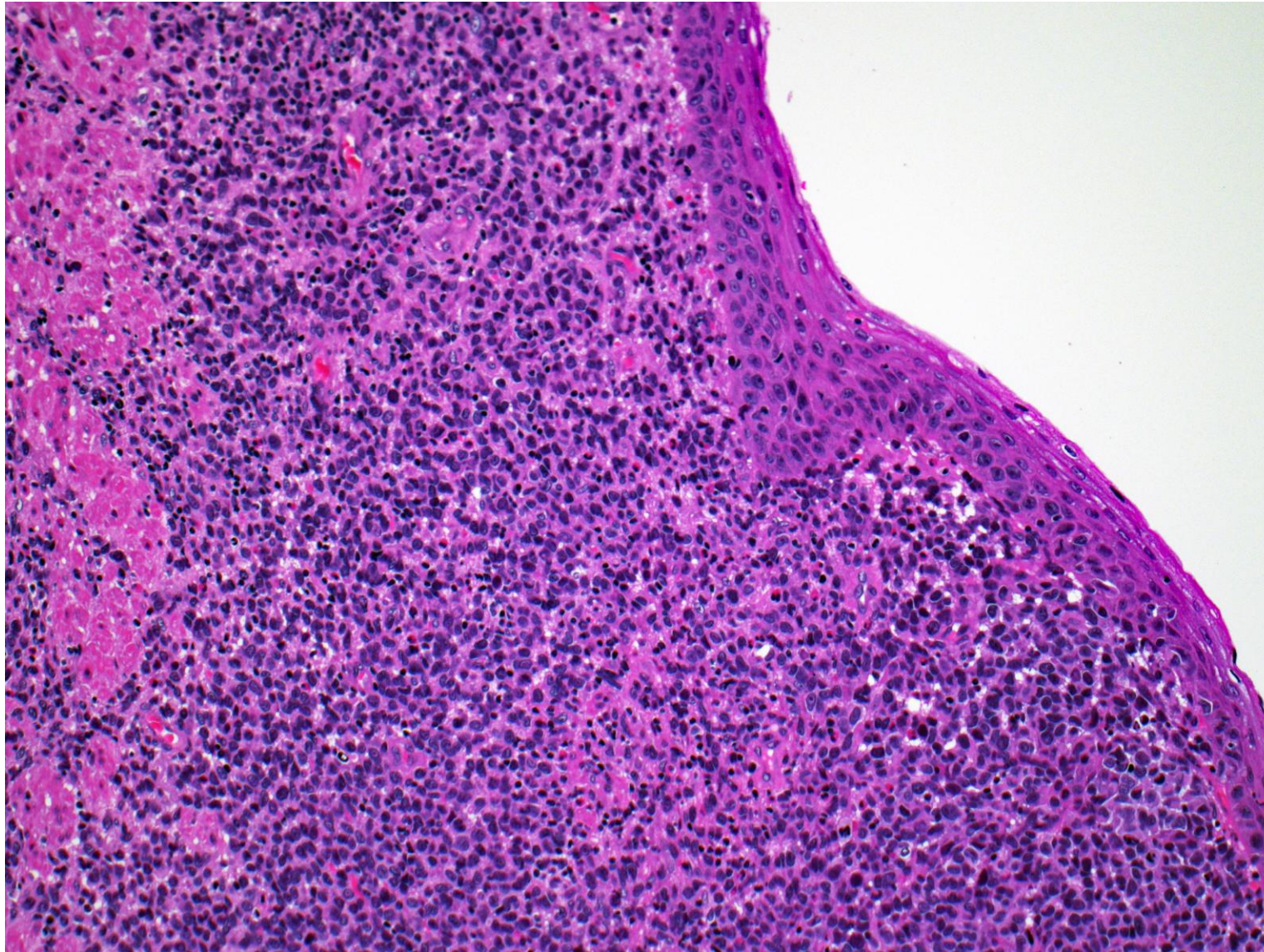
Amelanotic malignant melanoma has little or no pigment on visual inspection. Particularly in the small cell variant, it should microscopically be distinguished from a variety of small cell malignancies, including small cell carcinoma, Merkel cell carcinoma, malignant lymphoma, rhabdomyosarcoma, Ewing sarcoma and synovial sarcoma. Here presented is a 75 y-o male case of amelanotic melanoma of the anus, where electron microscopic study was of diagnostic value.

Immunohistochemically, the tumor cells were immunoreactive for melan A and CD117 (c-kit). HMB45 was focally positive.

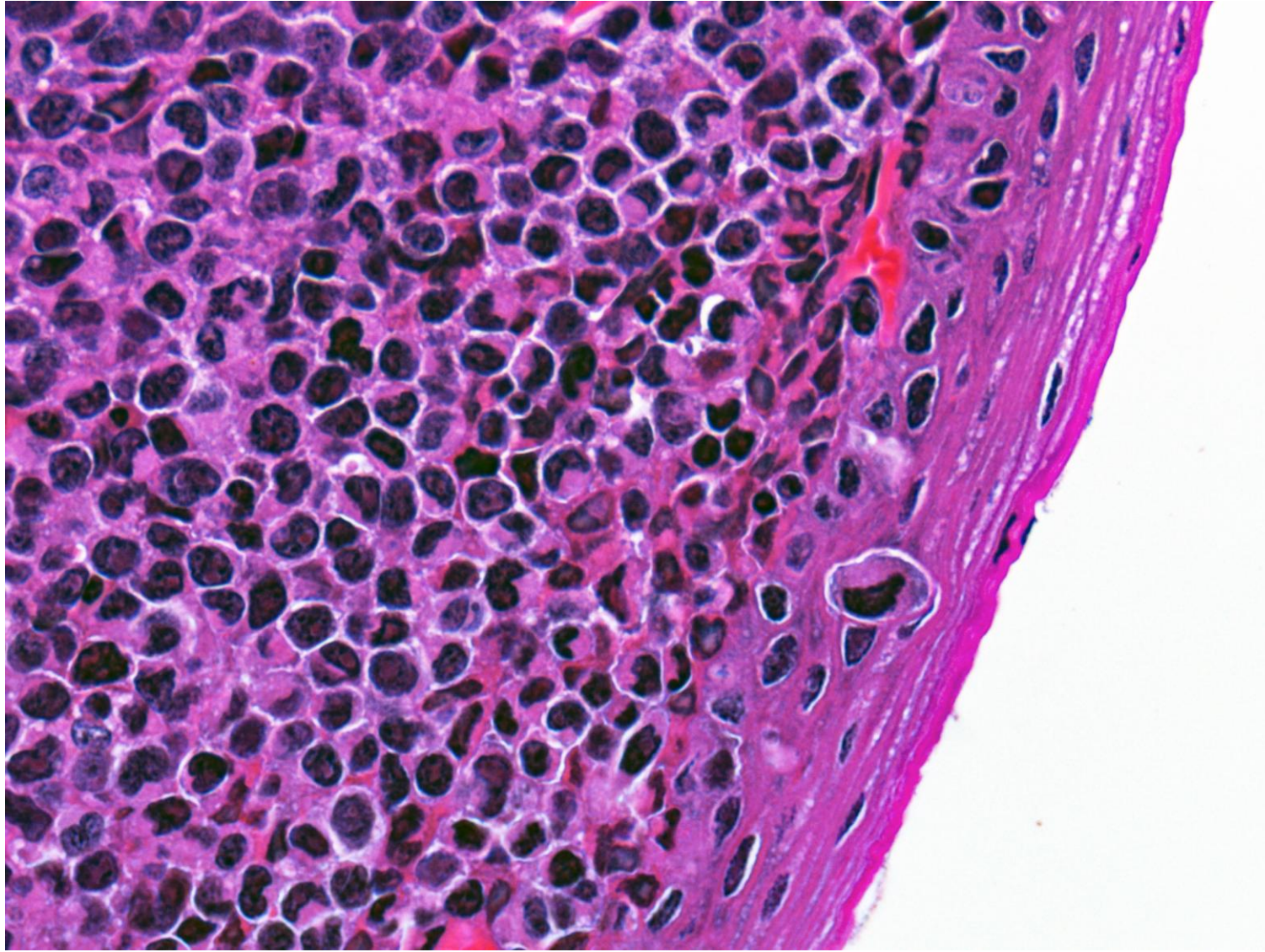
Ref.: Shetty A, et al. Amelanotic melanoma masquerading as a superficial small round cell tumor: a diagnostic challenge. Indian J Dermatol 2014; 59(6): 631. doi: 10.4103/0019-5154.143569



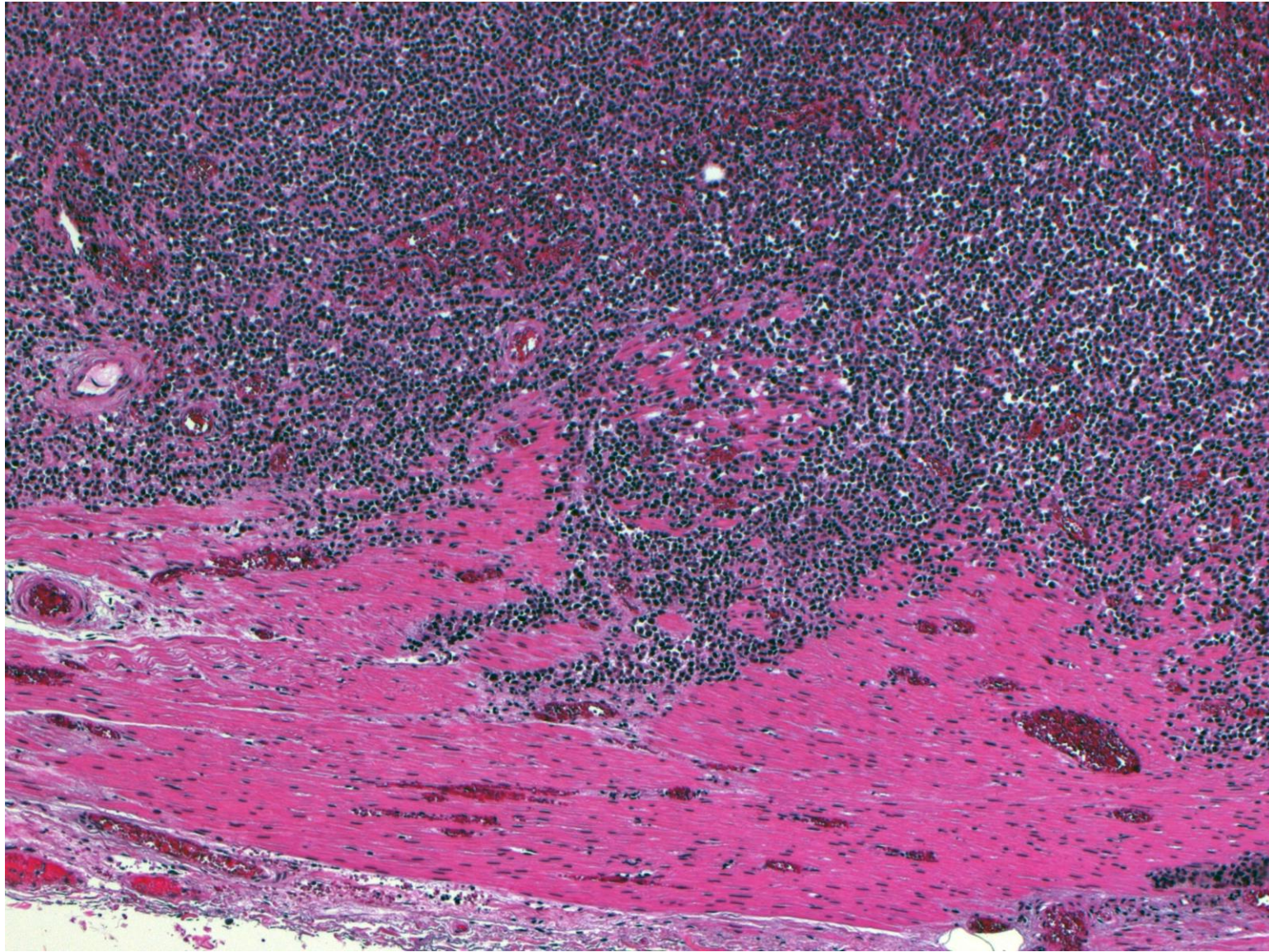
Amelanotic malignant melanoma of the anus, small cell type, seen in a 75 y-o male patient. The dermis is heavily infiltrated by small-sized tumor cells (H&E-1).



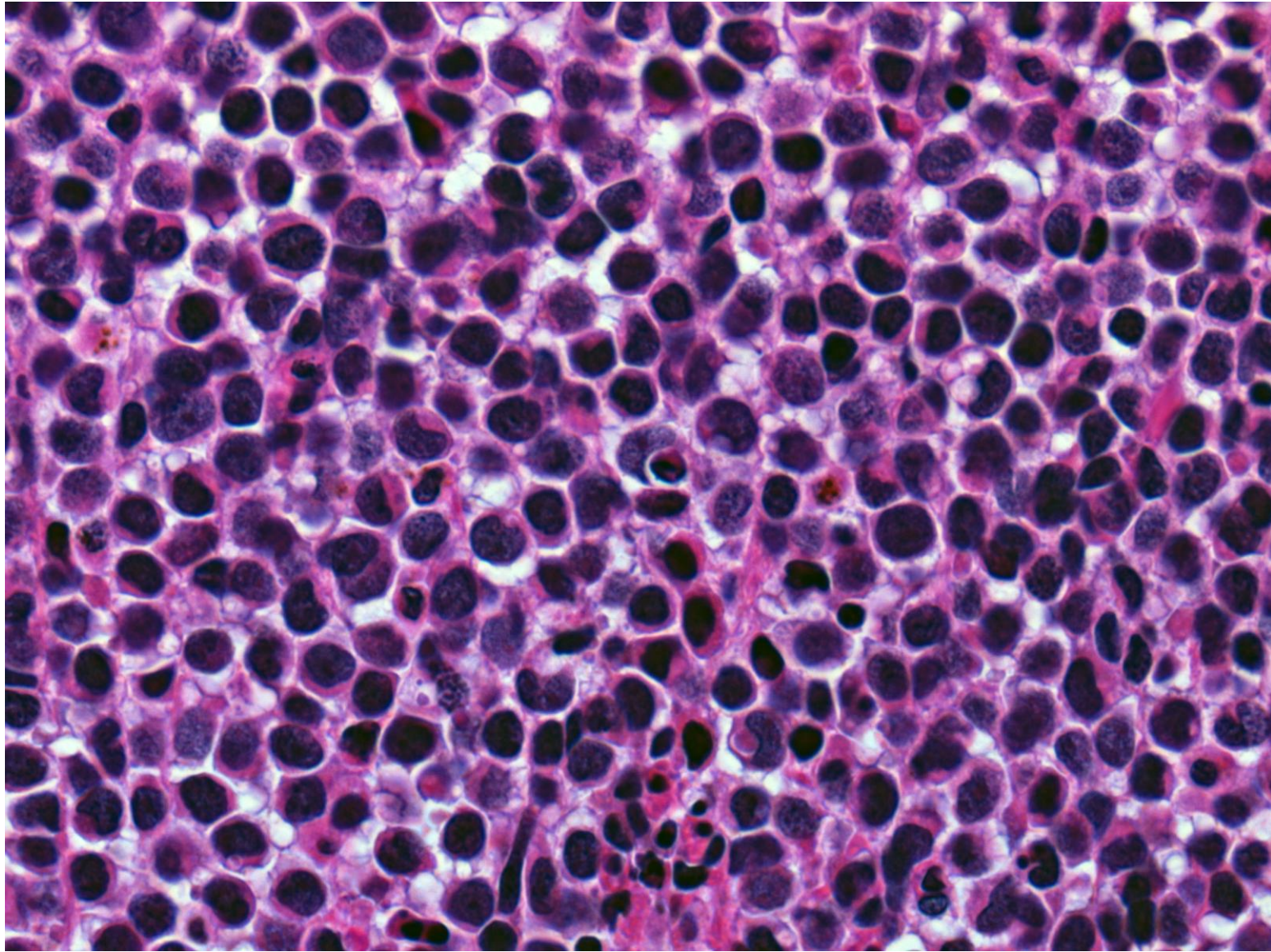
Amelanotic malignant melanoma of the anus, small cell type, seen in a 75 y-o male patient. The dermis is heavily infiltrated by small-sized tumor cells (H&E-2).



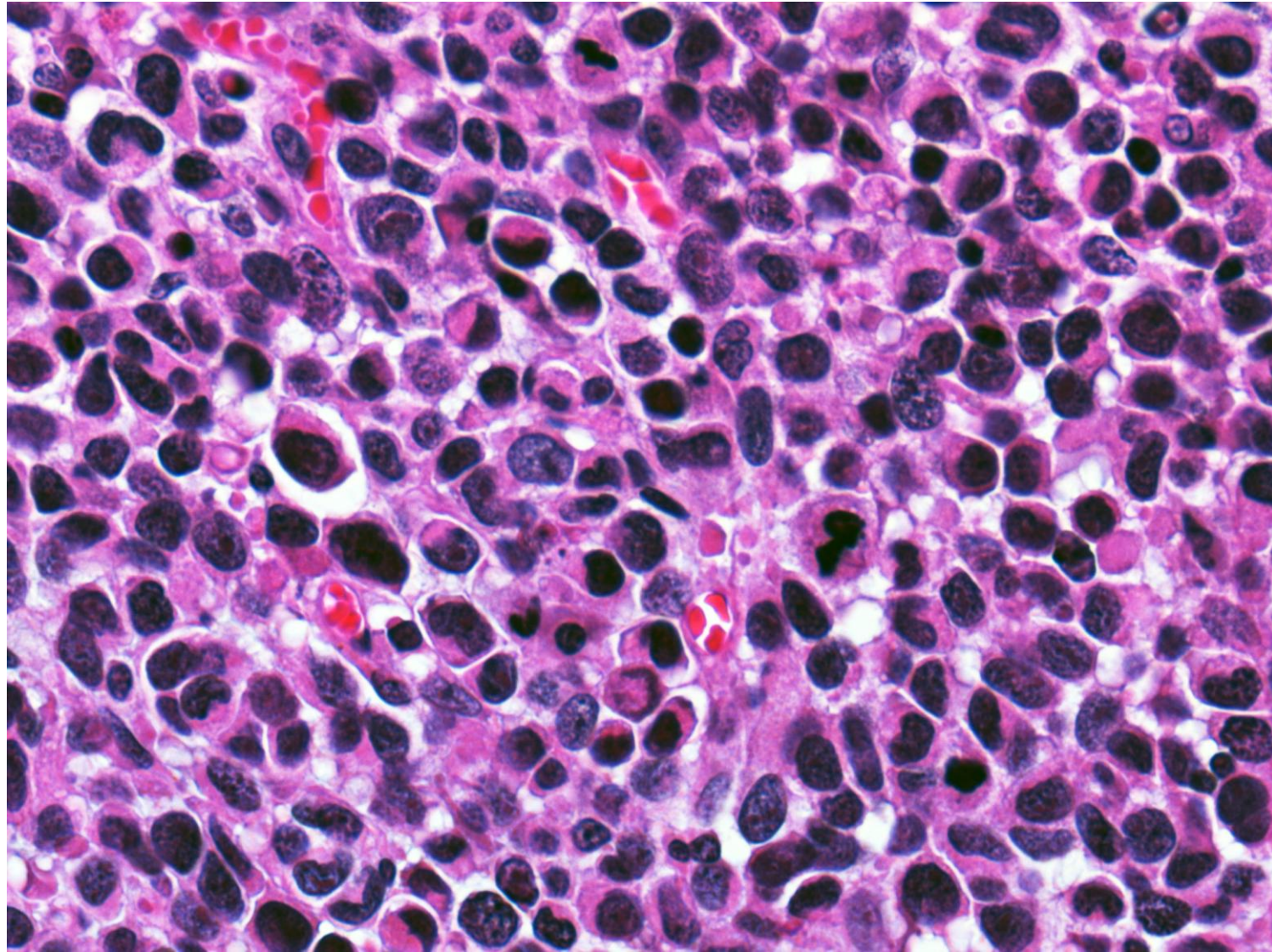
Amelanotic malignant melanoma of the anus, small cell type, seen in a 75 y-o male patient. The dermis is heavily infiltrated by small-sized tumor cells. The tumor cells invade the overlying anal squamous mucosa. Melanin production is not seen (H&E-3).



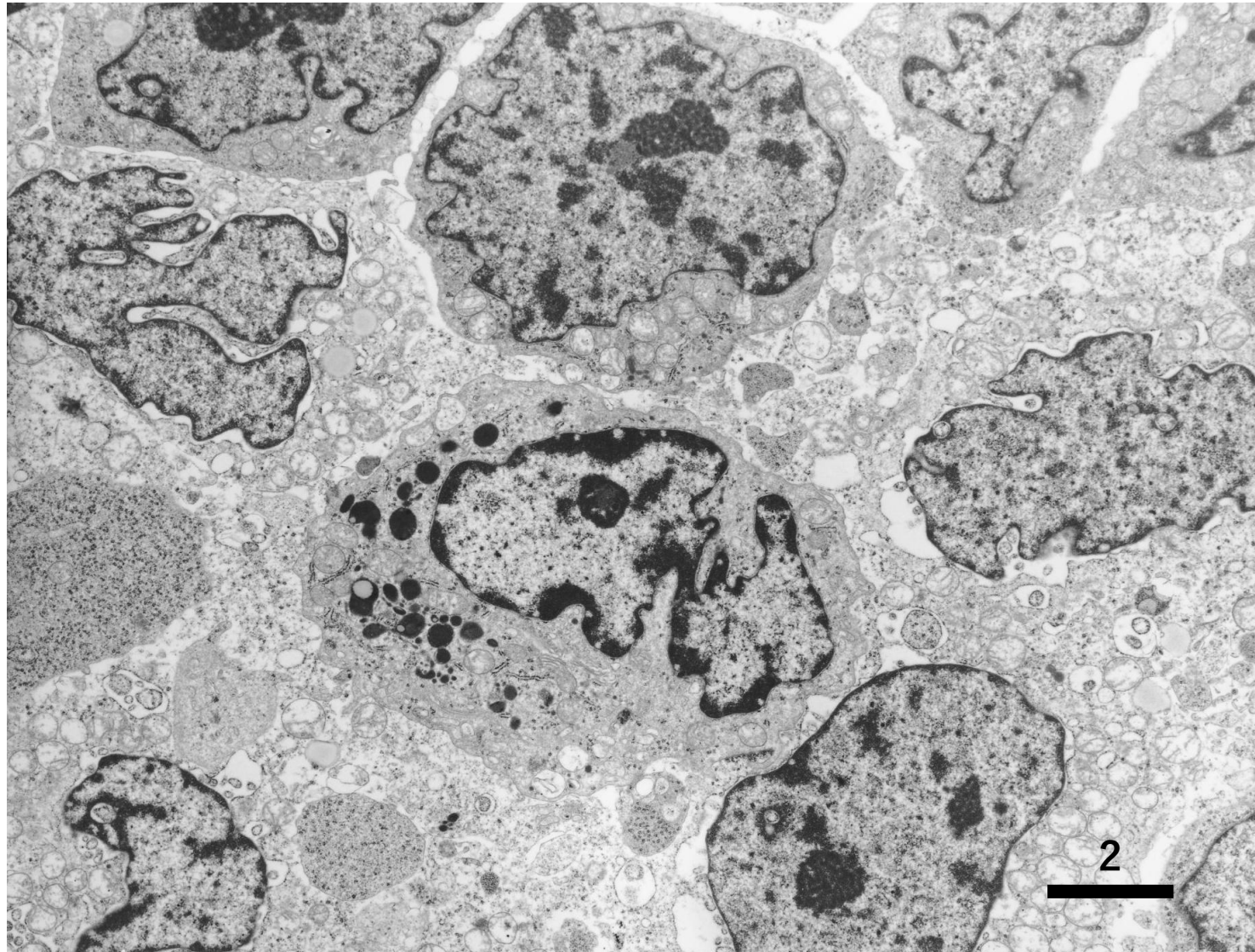
Amelanotic malignant melanoma of the anus, small cell type, seen in a 75 y-o male patient. The small-sized tumor cells invade the deep-seated smooth muscle layer (H&E-4).



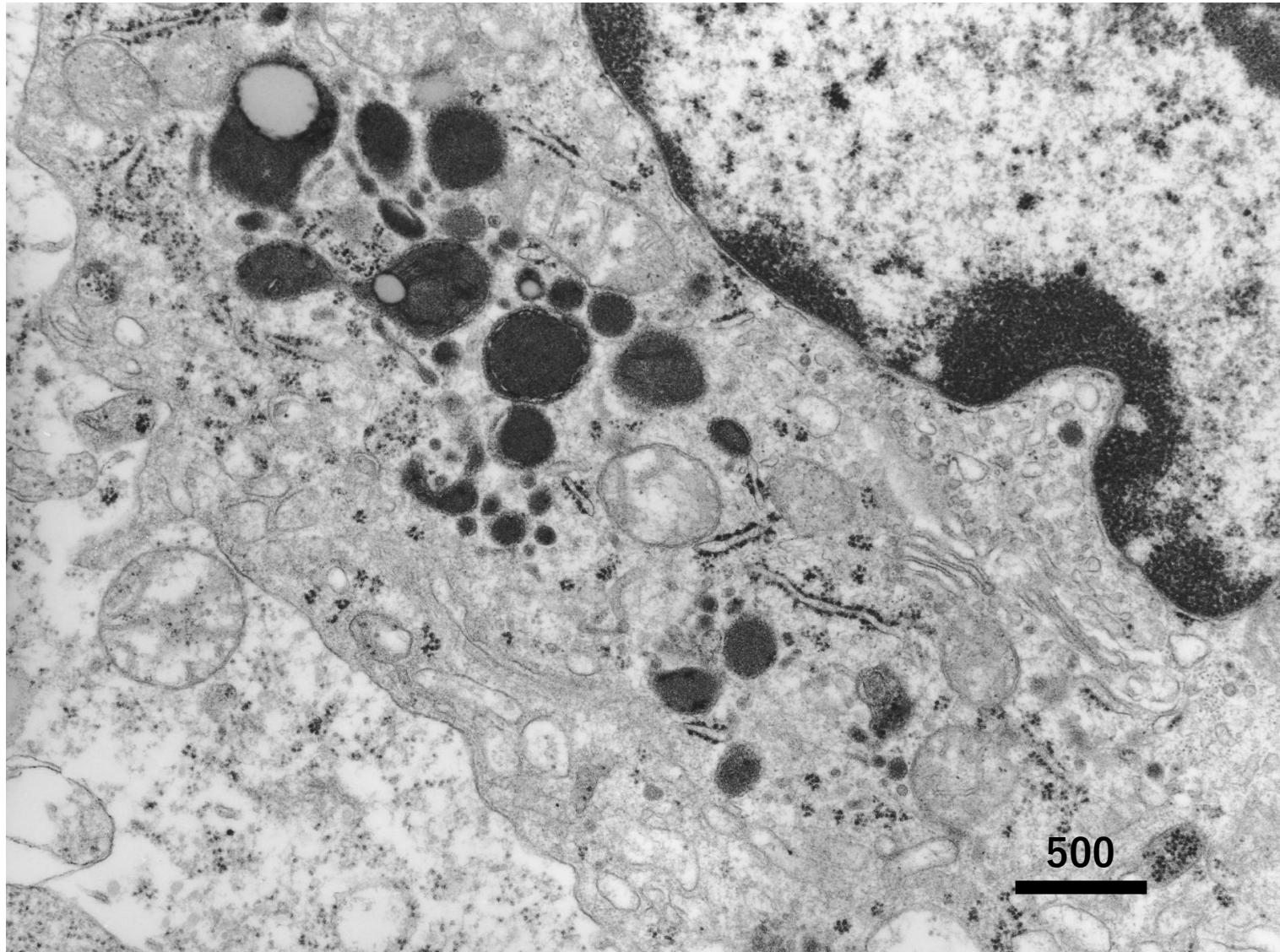
Amelanotic malignant melanoma of the anus, small cell type, seen in a 75 y-o male patient. The small-sized tumor cells possess hyperchromatic and irregular-shaped nuclei with a high N/C ratio. Melanin production is not observed (H&E-5).



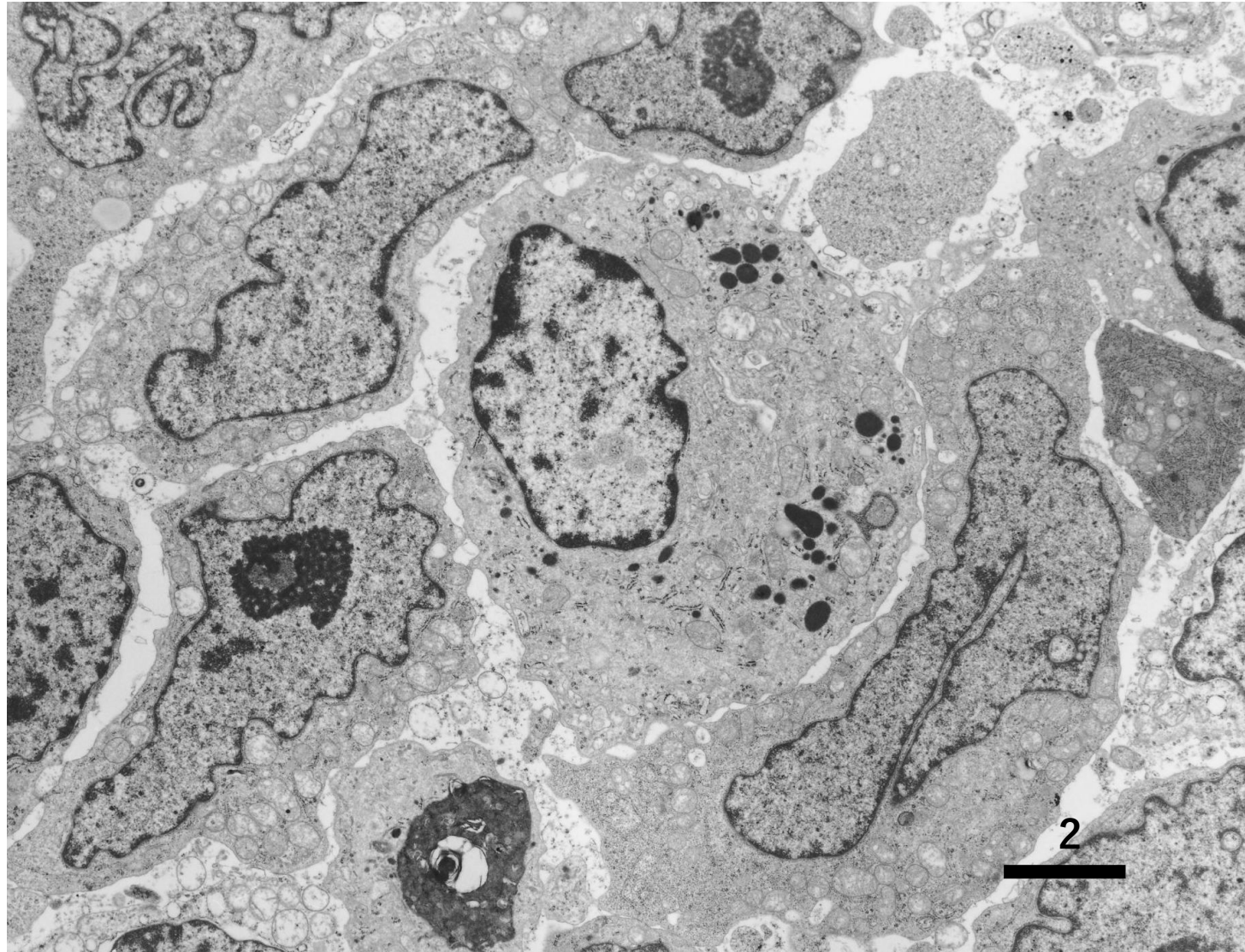
Amelanotic malignant melanoma of the anus, small cell type, seen in a 75 y-o male patient. The small-sized tumor cells possess hyperchromatic, irregular-shaped and mildly pleomorphic nuclei with a high N/C ratio. Mitoses are scattered. Melanin production is not observed (H&E-6).



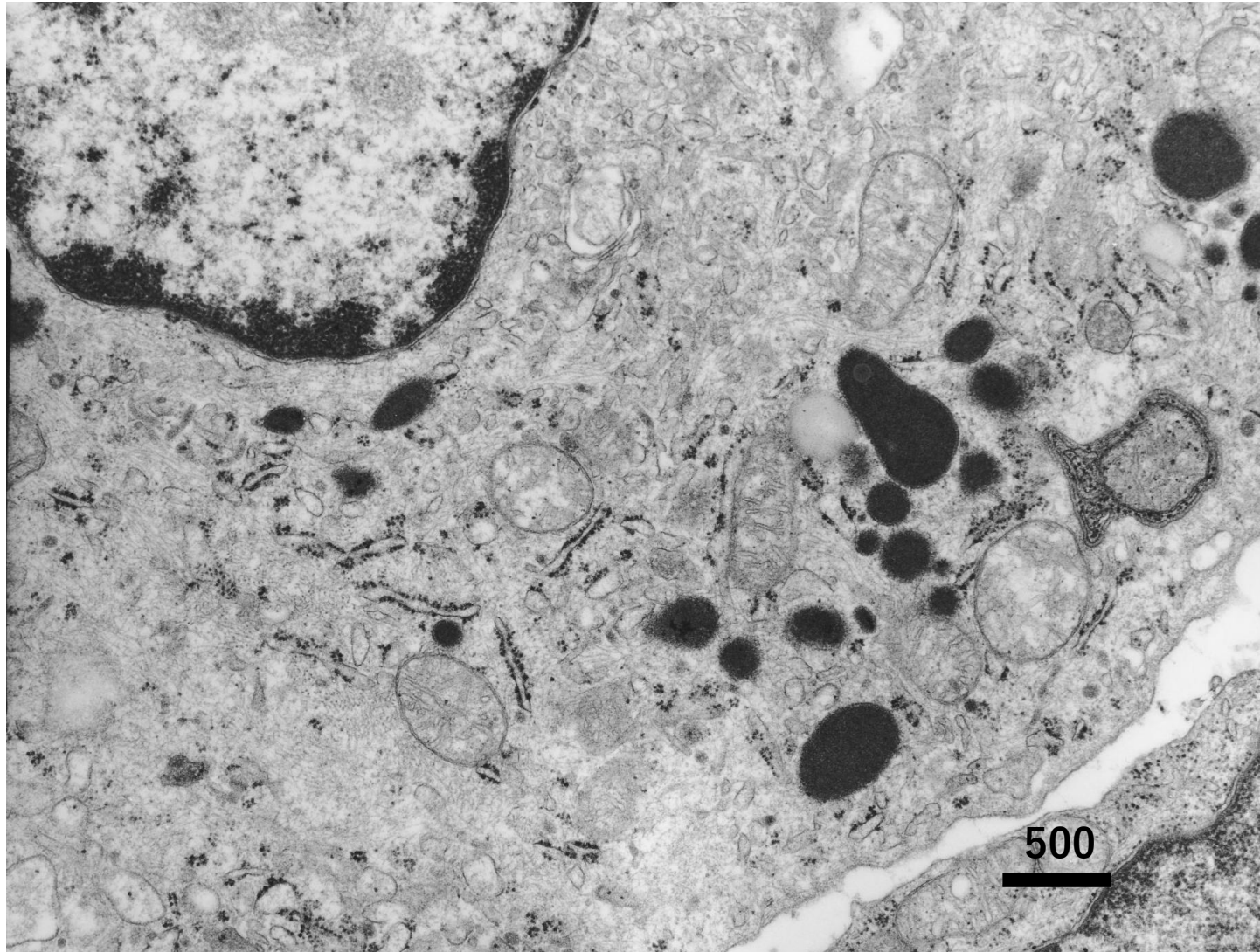
Ultrastructure of amelanotic malignant melanoma of the anus, small cell type, seen in a 75 y-o male patient. The small-sized tumor cells possess indented and irregular-shaped nuclei. Electron-dense granules of varying sizes are focally clustered in the cytoplasm (TEM-1).



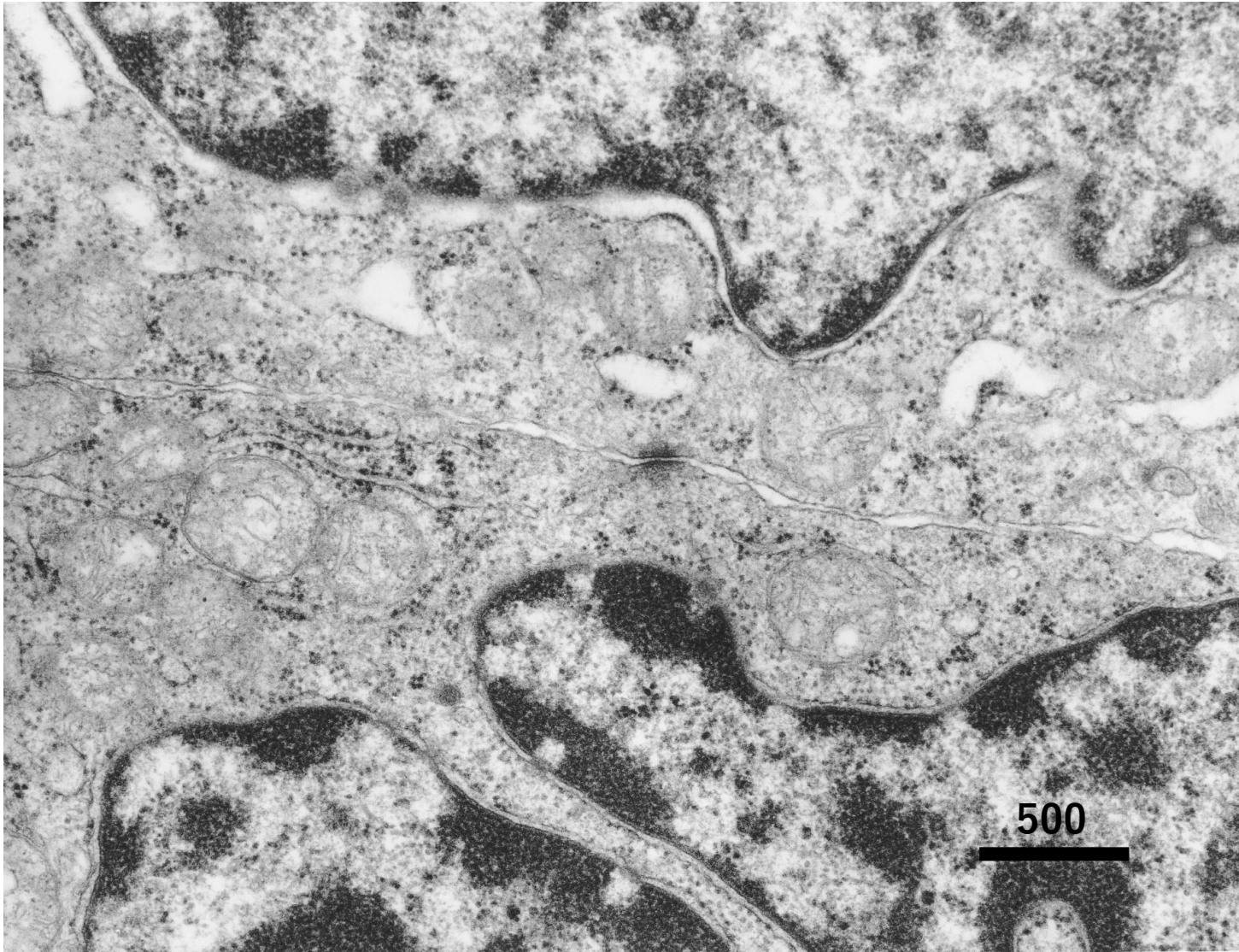
Ultrastructure of amelanotic malignant melanoma of the anus, small cell type, seen in a 75 y-o male patient. The small-sized tumor cells possess electron-dense granules (melanosomes). The size and shape variations and fingerprint-like configurations are noted (TEM-2).



Ultrastructure of amelanotic malignant melanoma of the anus, small cell type, seen in a 75 y-o male patient. The small-sized tumor cells possess indented and irregular-shaped nuclei. Electron-dense granules of varying sizes and shapes are focally clustered in the cytoplasm (TEM-3).



Ultrastructure of amelanotic malignant melanoma of the anus, small cell type, seen in a 75 y-o male patient. The small-sized tumor cells possess electron-dense granules (melanosomes). The size and shape variations are noted (TEM-4).



Ultrastructure of amelanotic malignant melanoma of the anus, small cell type, seen in a 75 y-o male patient. Many of the small-sized tumor cells lack melanosomes. A desmosomal junction is focally observed (TEM-5).