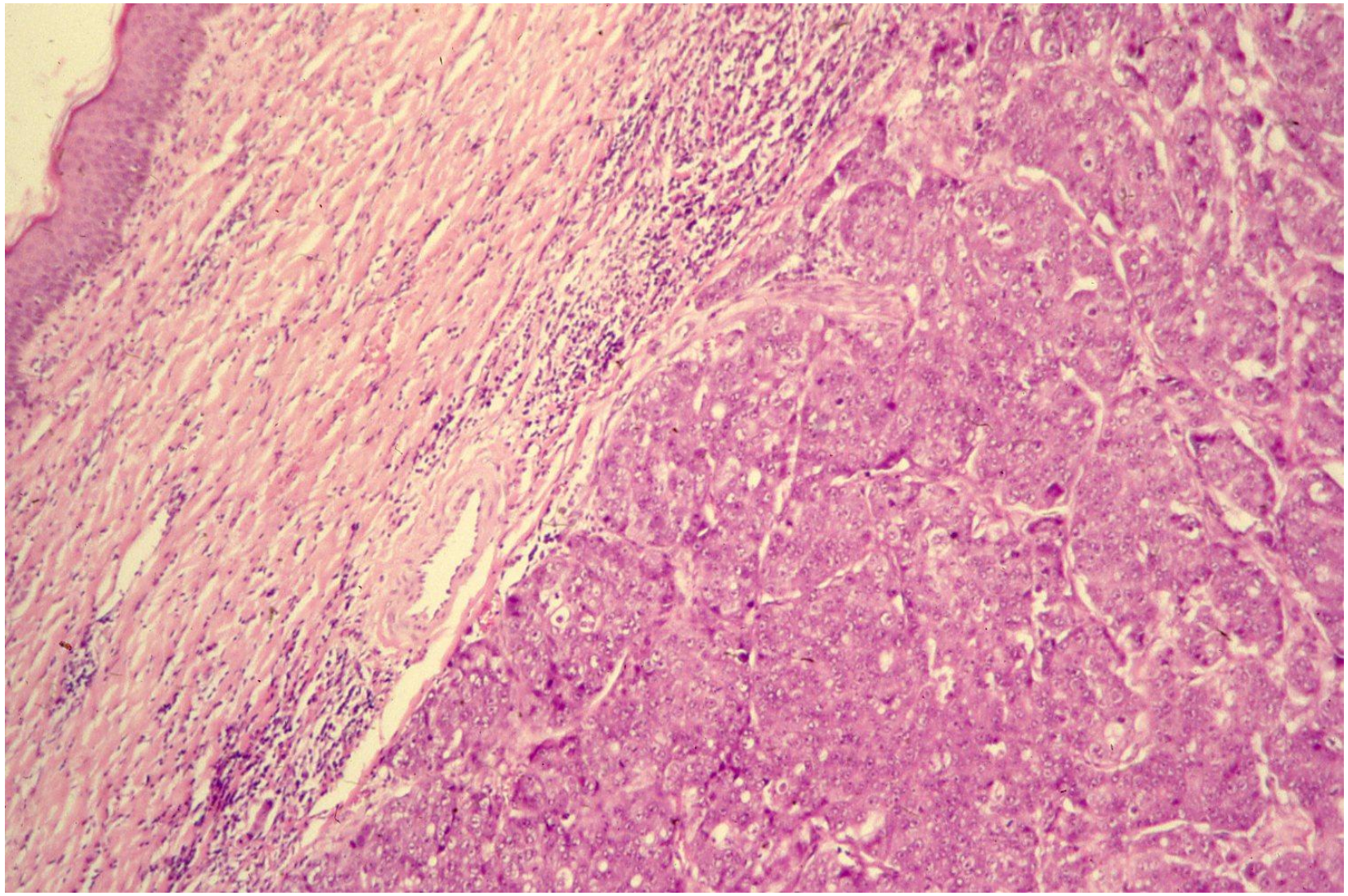
Eccrine gland carcinoma

Eccrine gland carcinoma, featured by a plaque or nodule on the scalp, trunk or extremities mainly in the sixth and seventh decade, is locally aggressive with a high rate of recurrence. It can be cured by wide local excision. Microscopically, eccrine gland carcinomas include a variety of subtypes, such as porocarcinoma, hidradenocarcinoma, malignant spiradenoma carcinoma, malignant cylindroma, syringoid eccrine carcinoma, microcystic adnexal carcinoma, mucinous carcinoma, adenoid cystic carcinoma and ductal papillary adenocarcinoma. The following tumors may be included in this category: eccrine ductal carcinoma, basaloid eccrine carcinoma, clear cell eccrine carcinoma, signet ring ell carcinoma and non-specified sweat gland carcinomas. Immunohistochemical markers for detecting eccrine carcinoma consist of CEA, PgR, ER, EMA, CK7 and pancytokeratins. Resemblance to breast carcinomas can be pointed out.

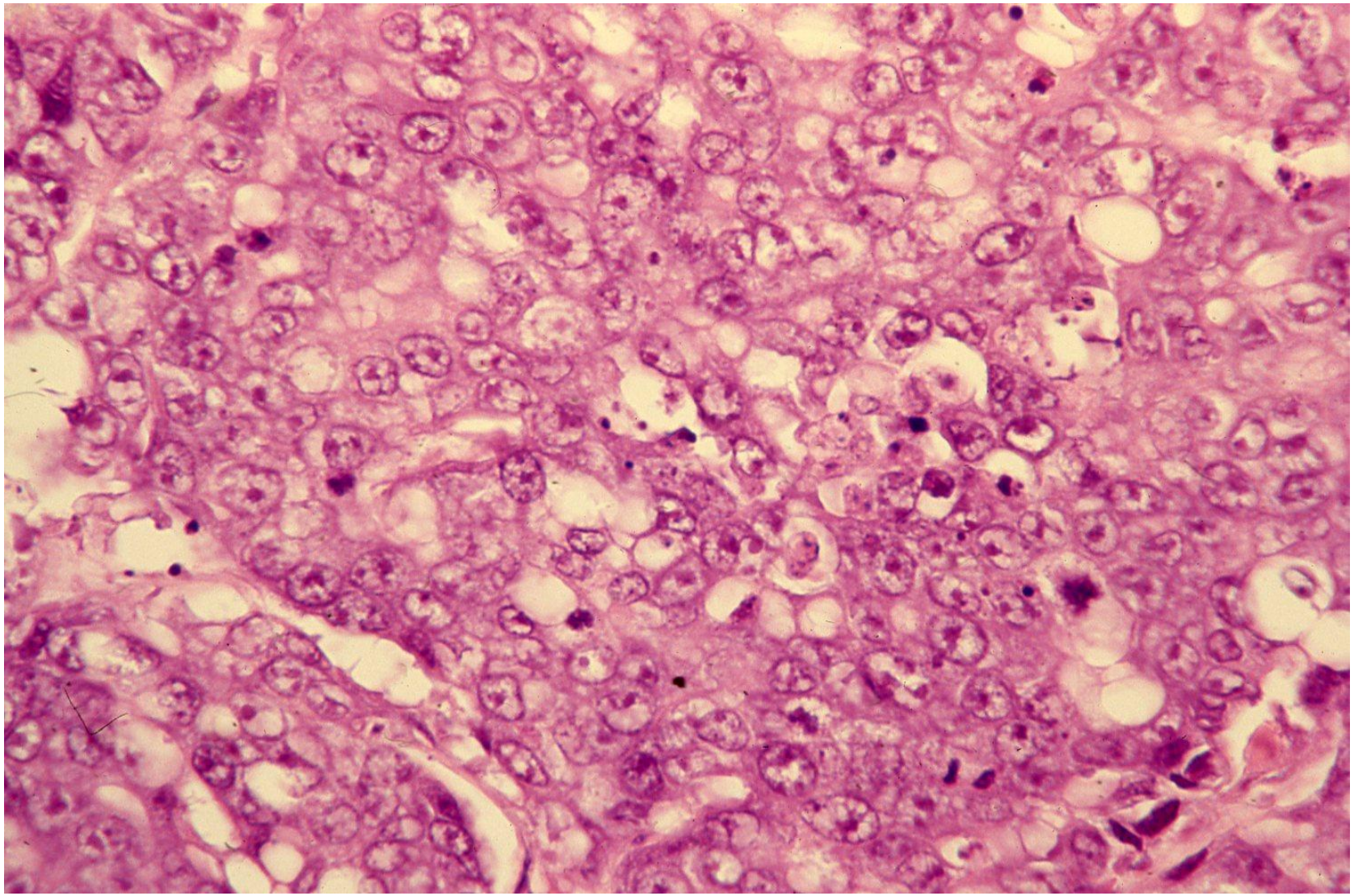
Ref.: Idrissi Serhrouchni K, et al. Eccrine carcinoma: a rare cutaneous neoplasm. Diagn Pathol 2013; 8: 15. doi: 10.1186/1746-1596-8-15

Case 1
(73M)



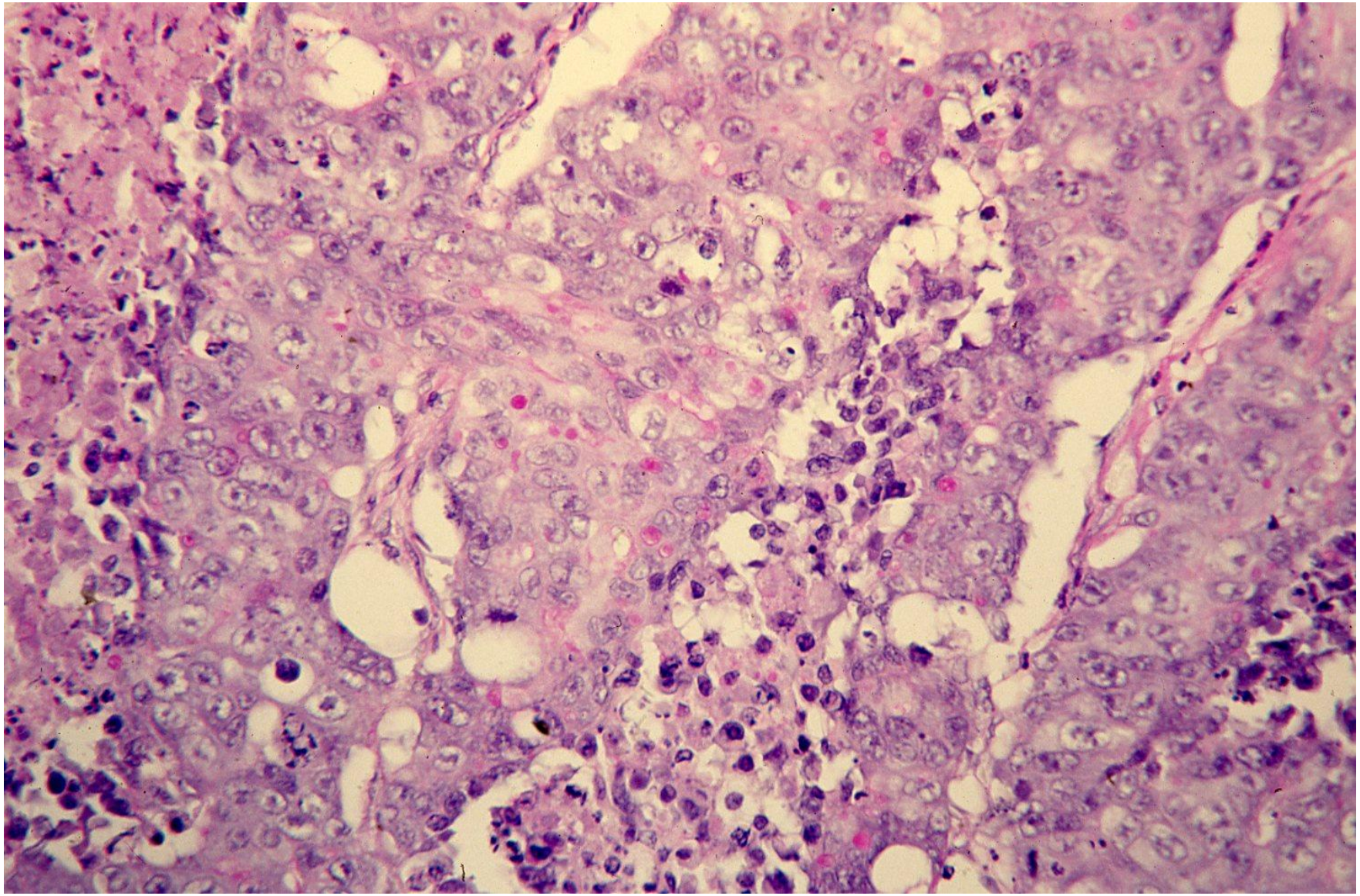
Eccrine gland adenocarcinoma seen in the upper arm of a 73 y-o female patient.
Poorly differentiated adenocarcinoma grows in the dermis (H&E-1)

Case 1
(73M)



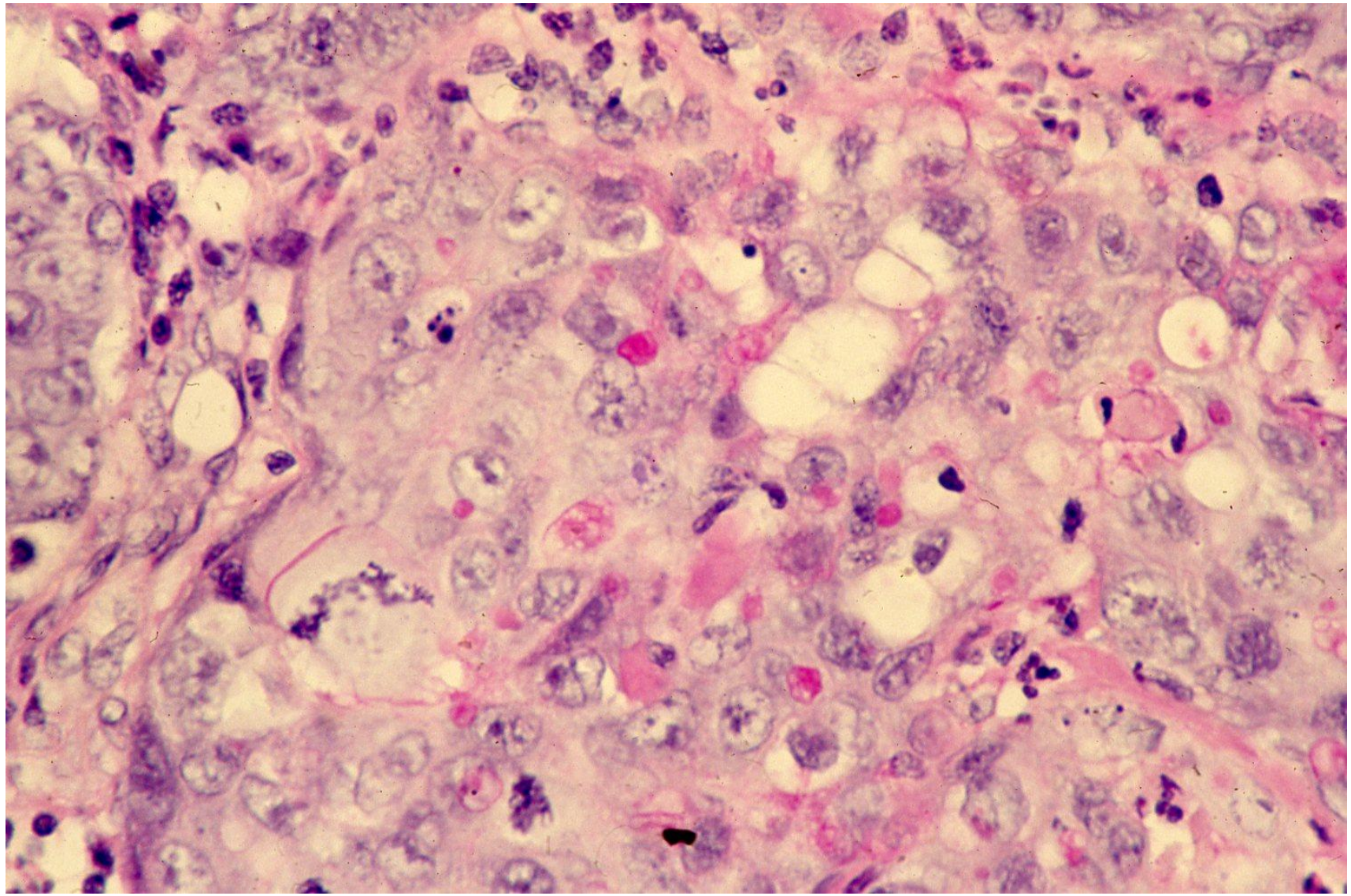
Eccrine gland adenocarcinoma seen in the upper arm of a 73 y-o female patient. Poorly differentiated adenocarcinoma grows in the dermis. Enlarged nuclei with prominent nucleoli are observed. Mitoses and apoptosis are associated (H&E-2)

Case 1
(73M)



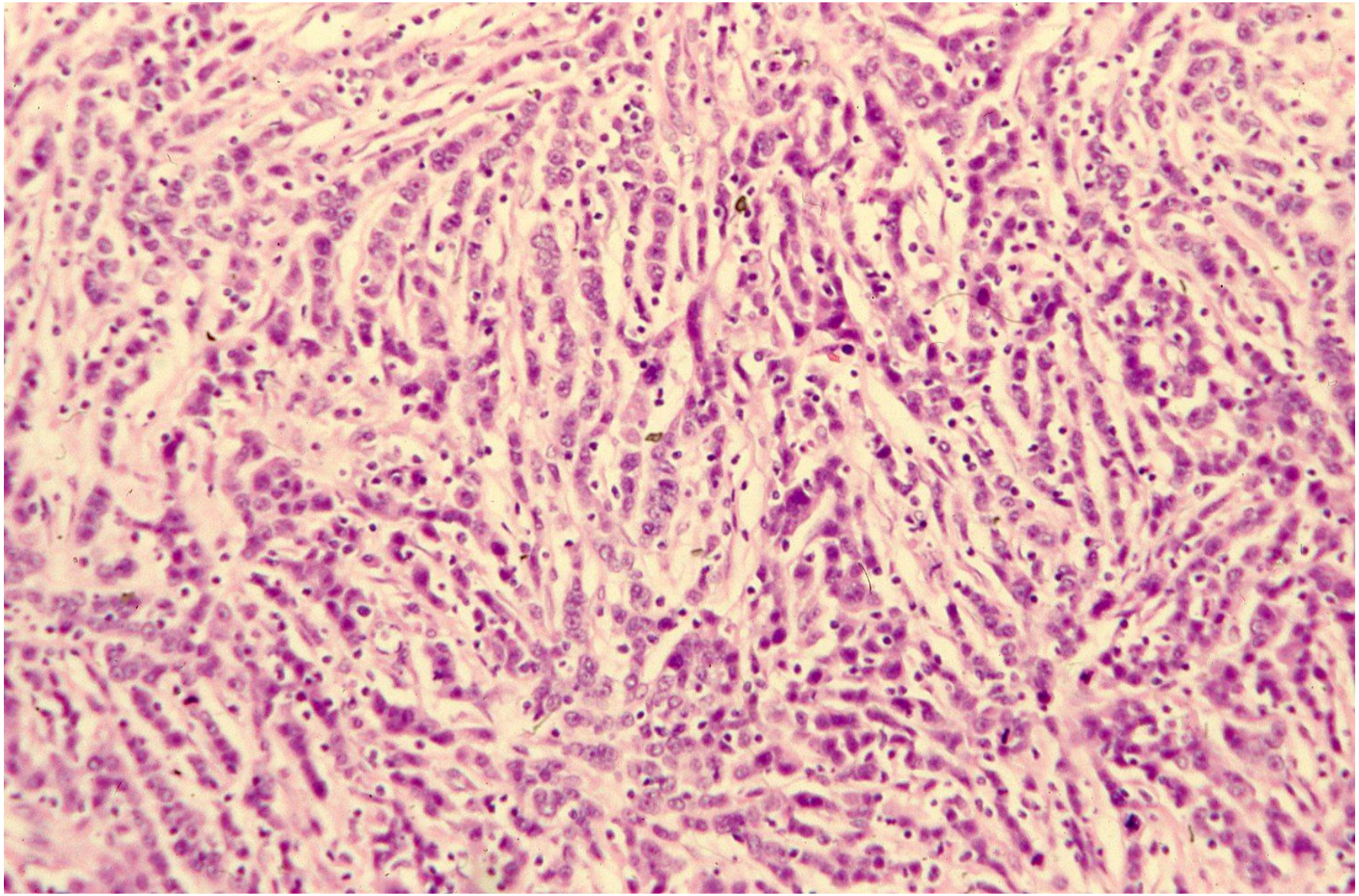
Eccrine gland adenocarcinoma seen in the upper arm of a 73 y-o female patient. Poorly differentiated adenocarcinoma grows in the dermis. Necrosis is focally observed. PAS-reactive mucin is seen in the cytoplasm of the cancer cells (PAS-1)

Case 1
(73M)



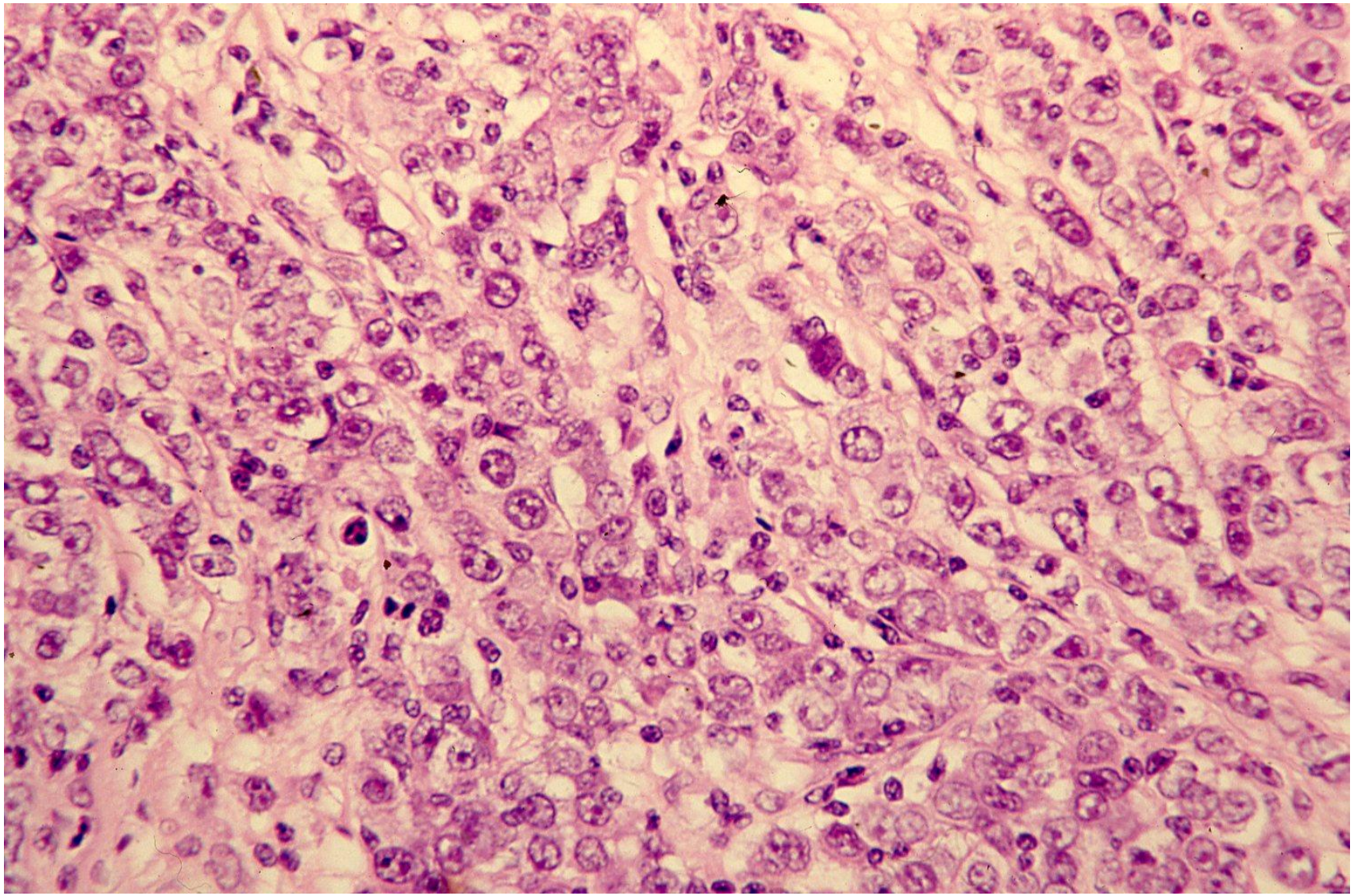
Eccrine gland adenocarcinoma seen in the upper arm of a 73 y-o female patient. Poorly differentiated adenocarcinoma grows in the dermis. PAS-reactive mucin is seen in the cytoplasm of the cancer cells (PAS-2)

Case 2
(84M)



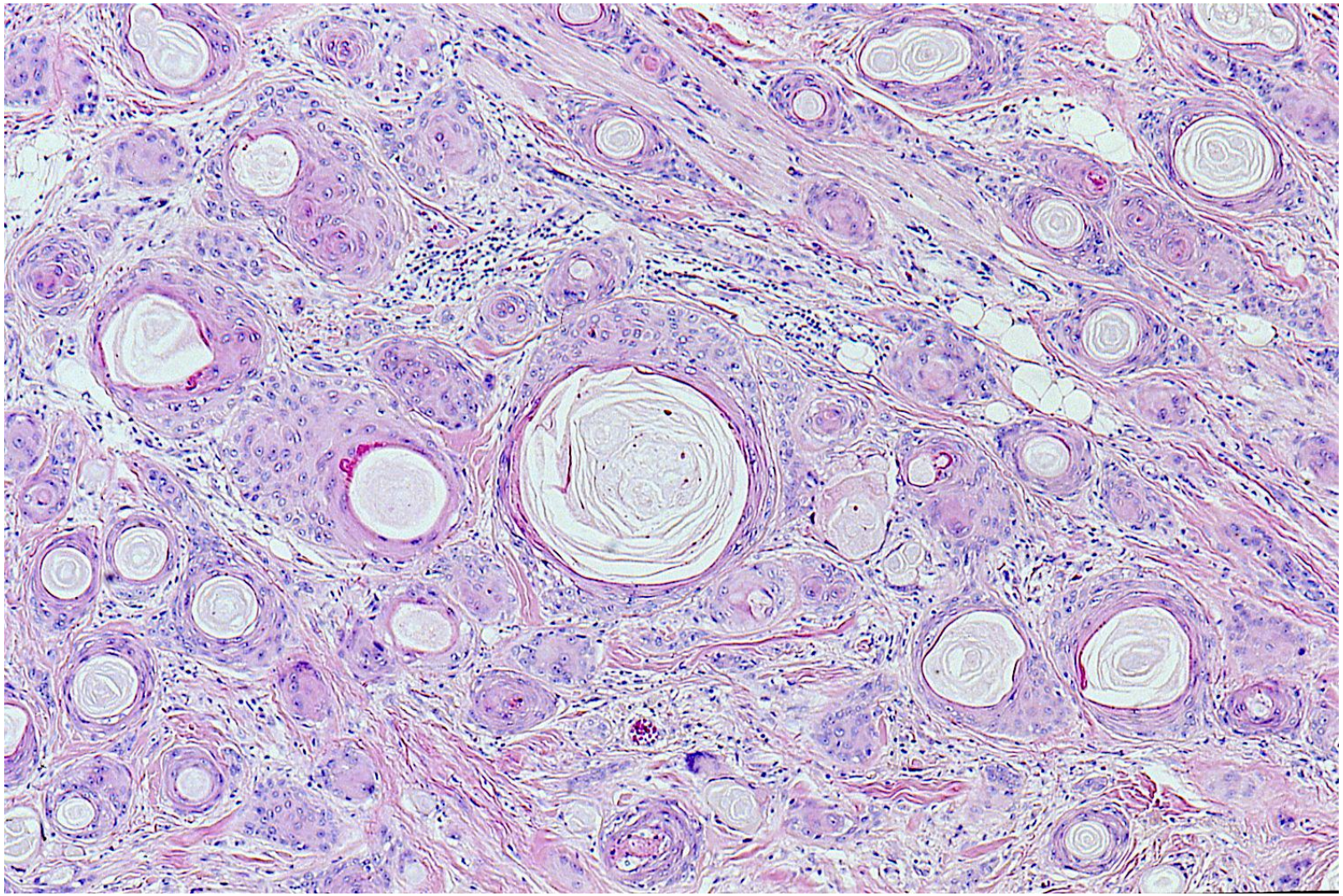
Eccrine gland adenocarcinoma seen in the forearm of an 84 y-o male patient. Poorly differentiated adenocarcinoma grows in the dermis. Trabecular arrangement is observed, and mild lymphocytic infiltration is associated (H&E-3)

Case 2
(84M)



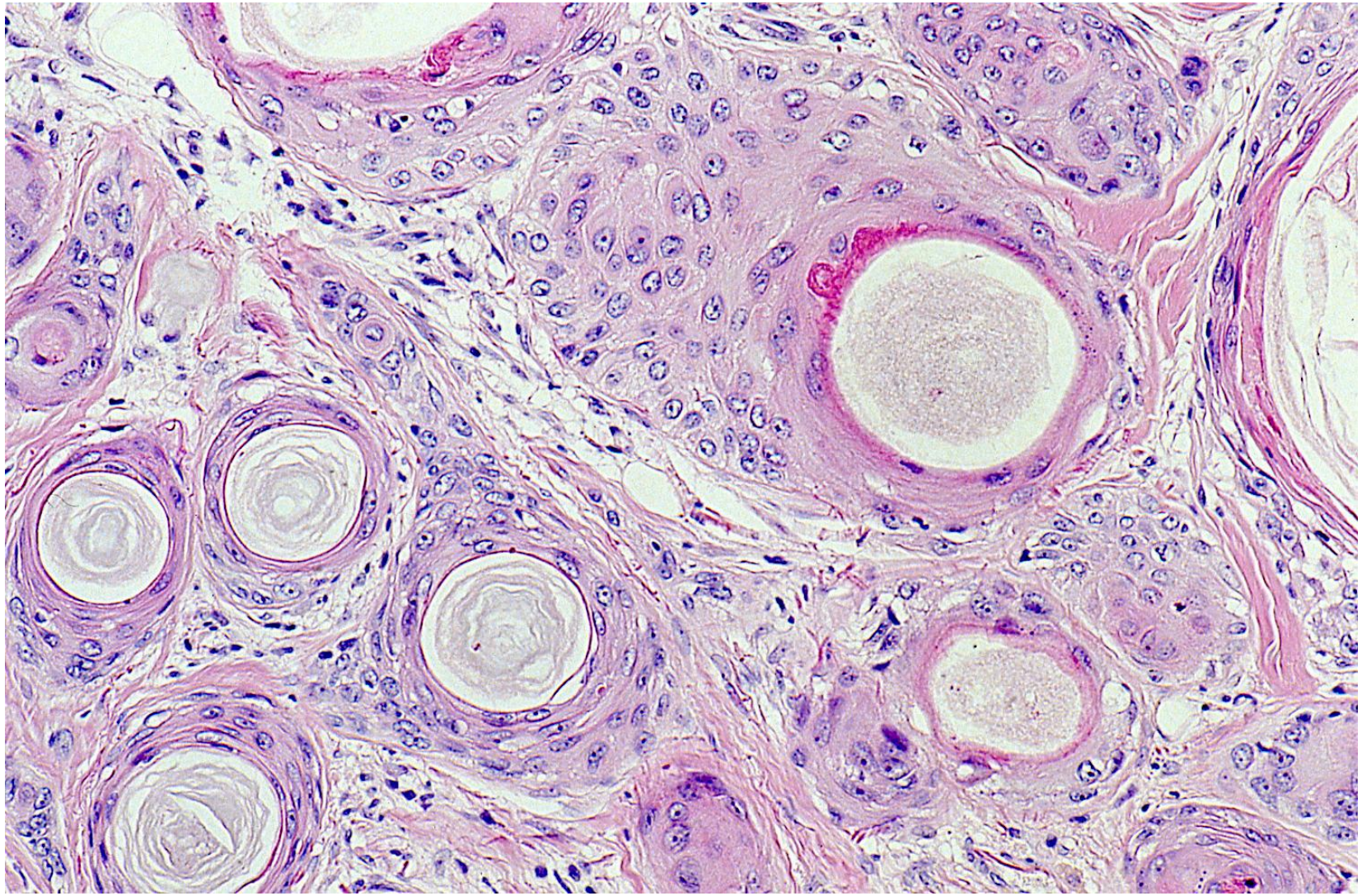
Eccrine gland adenocarcinoma seen in the forearm of an 84 y-o male patient. Poorly differentiated adenocarcinoma grows in the dermis. Enlarged nuclei with distinct nucleoli are observed (H&E-4)

Case 3
(50'sF)



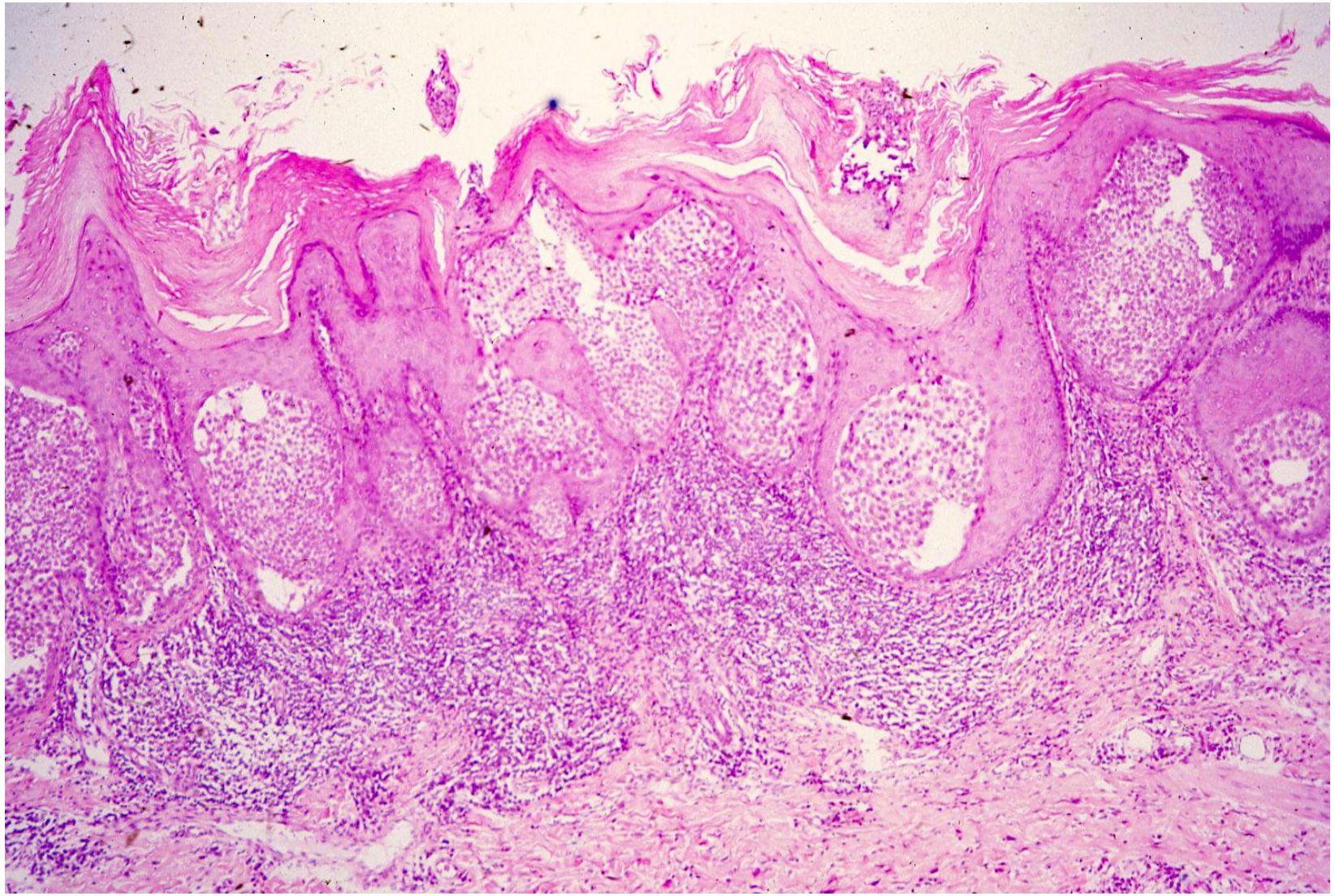
Microcystic adnexal carcinoma seen in the face of a female patient aged 50's. This is a special type of carcinoma of eccrine gland origin. The microcysts contain keratinous material (H&E-5).

Case 3
(50'sF)



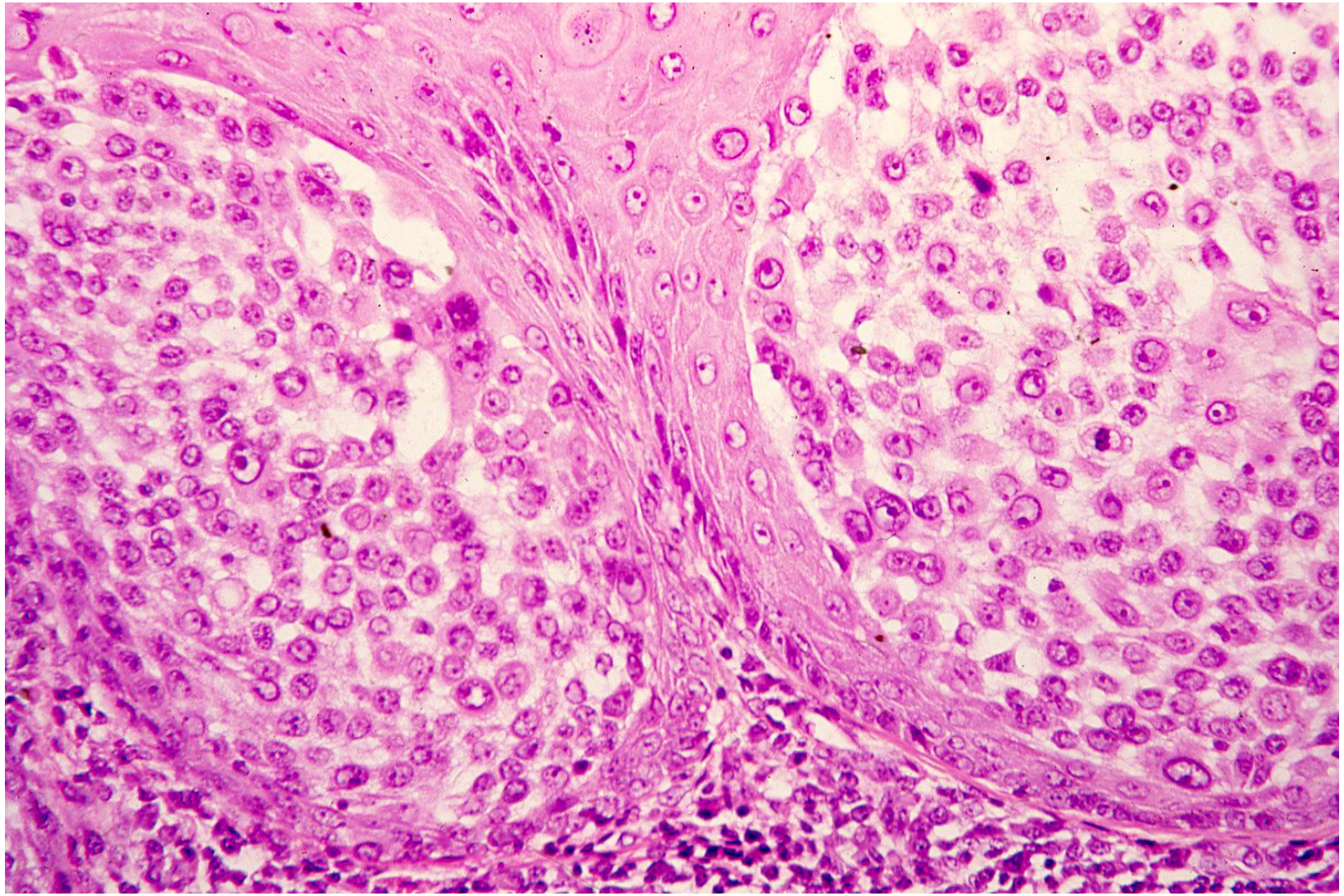
Microcystic adnexal carcinoma seen in the face of a female patient aged 50's. This is a special type of carcinoma of eccrine gland origin. The microcysts contain keratinous material (H&E-6).

Case 4
(51M)



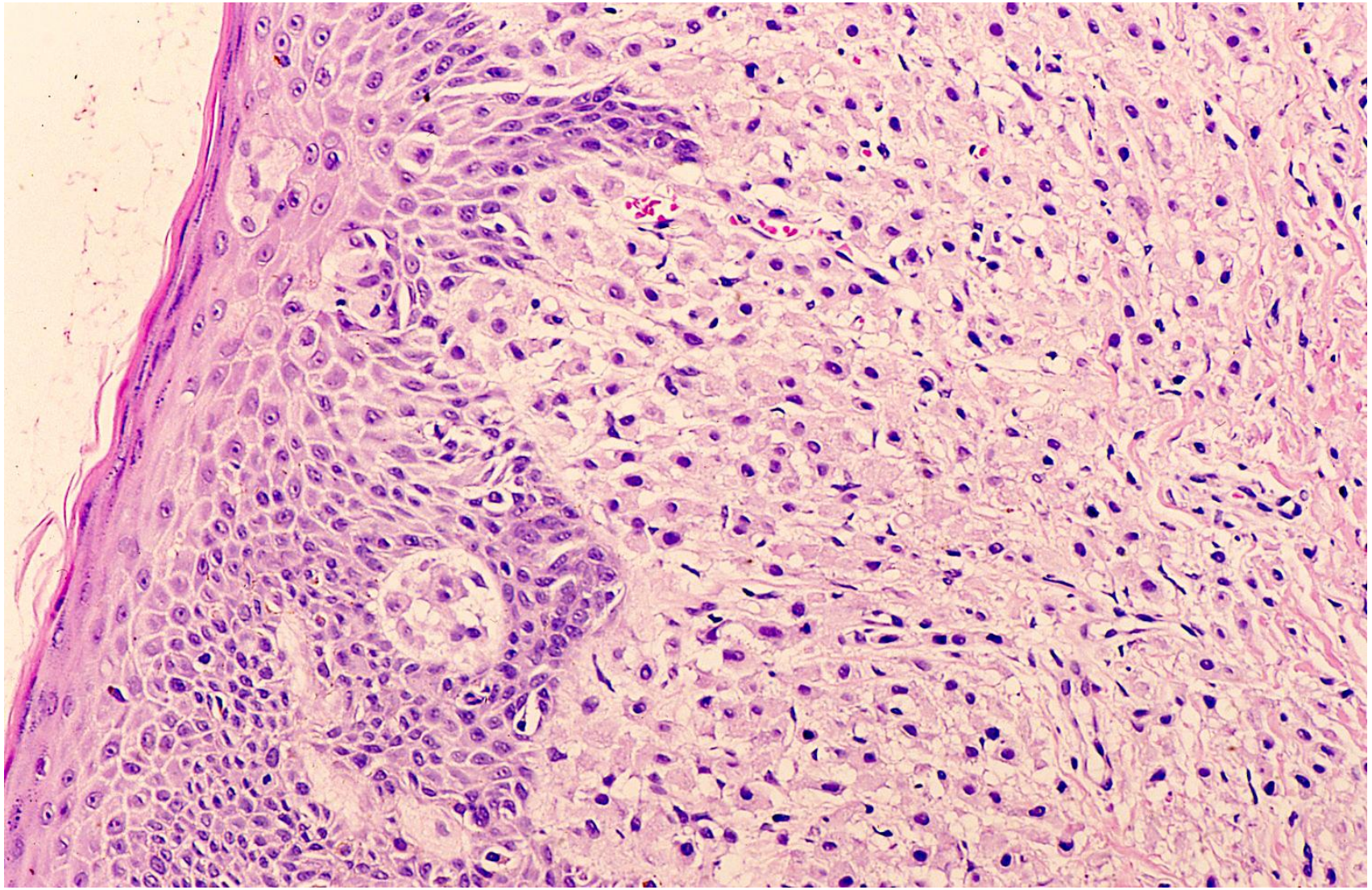
Malignant eccrine poroma seen in the thigh of a 51 y-o male patient. Intraepidermal nested growth of atypical poroid cells is observed. Lymphocytic reaction is associated (H&E-7).

Case 4
(51M)



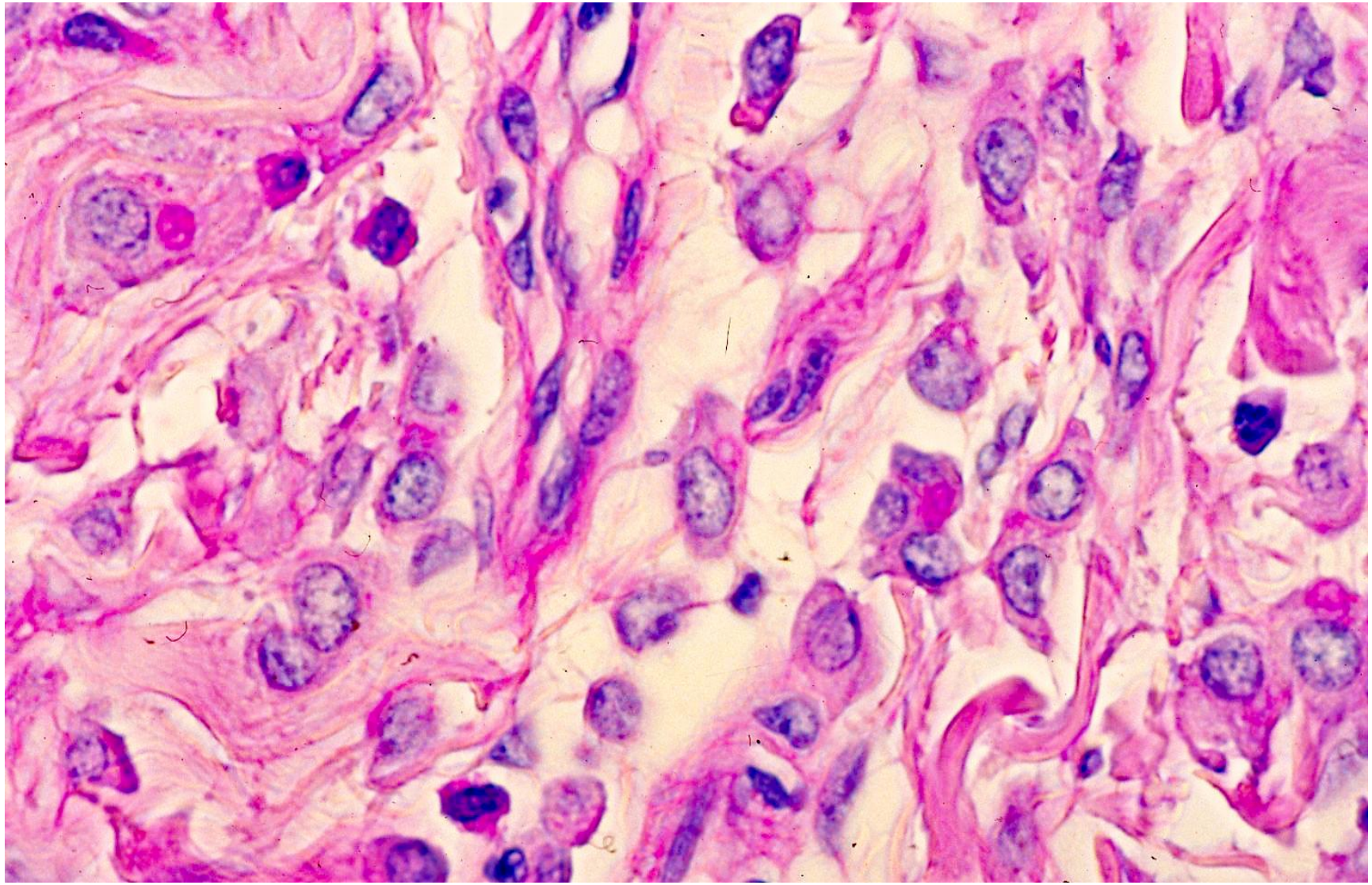
Malignant eccrine poroma seen in the thigh of a 51 y-o male patient. Intraepidermal nested growth of atypical poroid cells is observed. Nuclear enlargement and prominent nucleoli are noted. Lymphocytic reaction is associated (H&E-8).

Case 5
(73M)



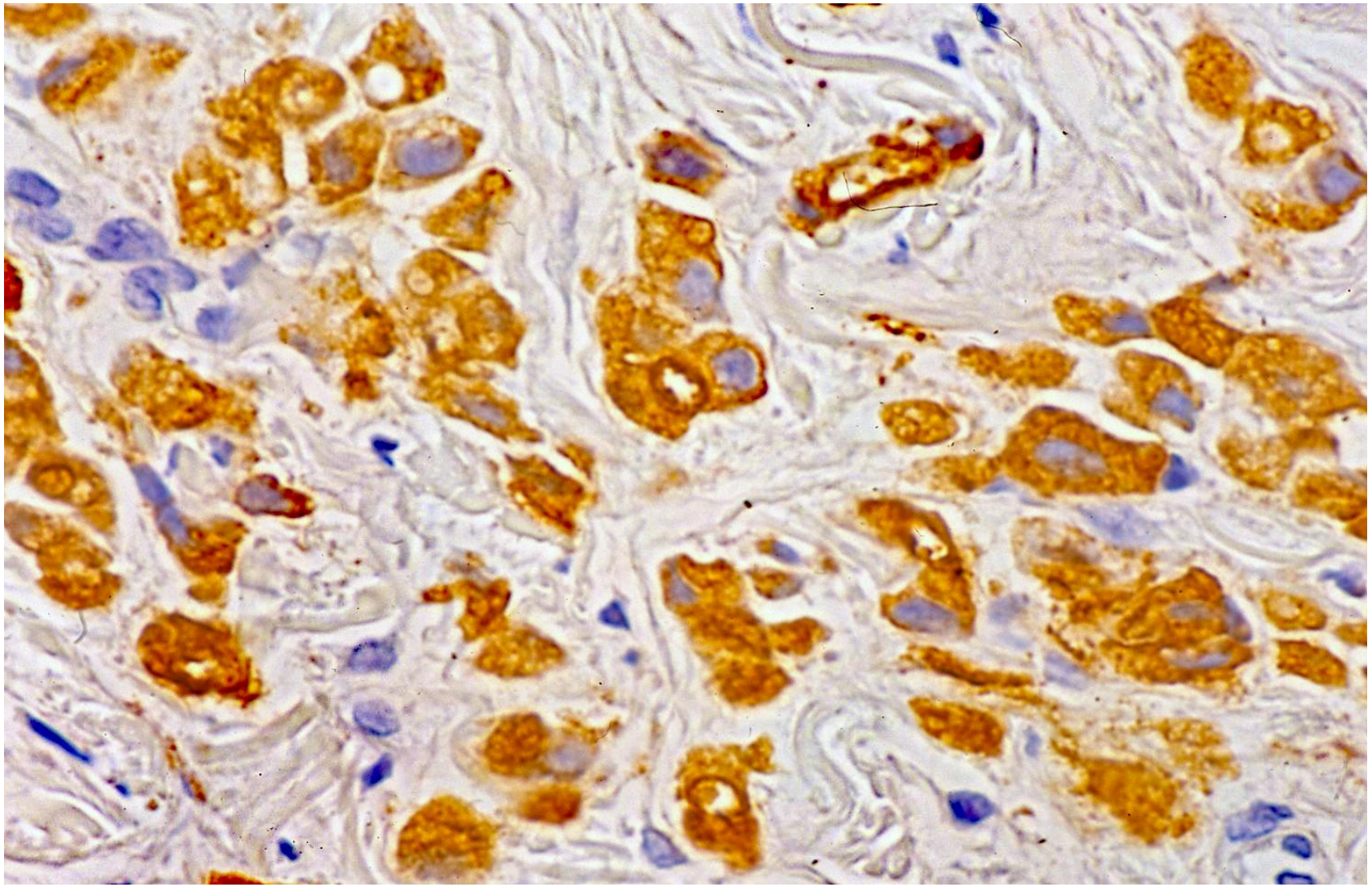
Signet ring cell carcinoma in the groin of a 73 y-o male patient. Intradermal infiltration of signet ring-type cancer cells is noted, and epidermotropism is associated (H&E-9).

Case 5
(73M)



Signet ring cell carcinoma in the groin of a 73 y-o male patient. PAS-reactive mucin is observed in the cytoplasm of the signet ring-type cells infiltrating in the dermis (PAS).

Case 5
(73M)



Signet ring cell carcinoma in the groin of a 73 y-o male patient. EMA is diffusely expressed in the signet ring-type cancer cells infiltrating in the dermis (immunostaining for EMA).