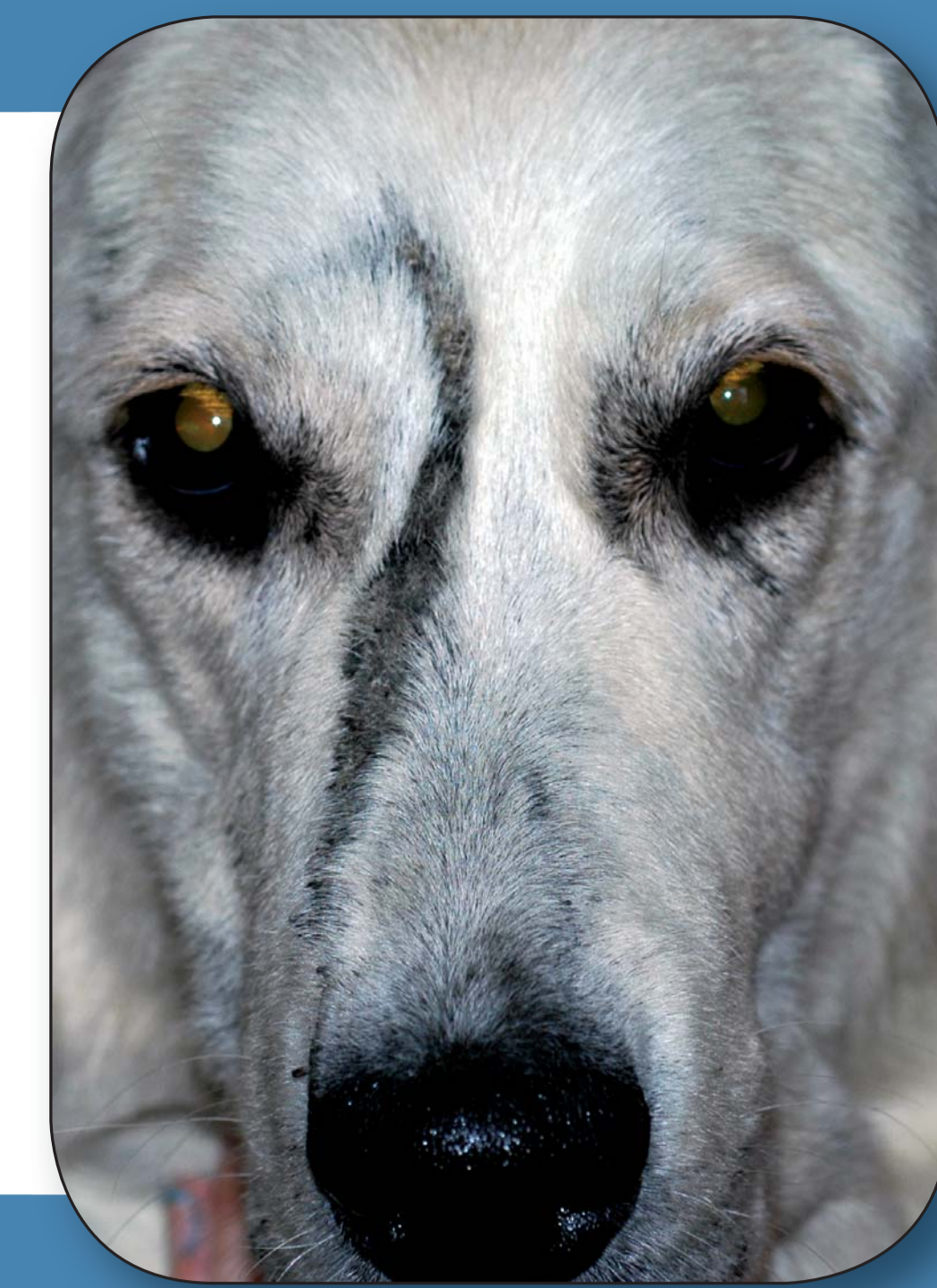


SEBACEOUS NEVUS OF JADASSOHN DISTRIBUTED ALONG BLASCHKO'S LINES IN A GOLDEN RETRIEVER DOG

E. GUAGUERE ⁽¹⁾, F. DEGORCE-RUBIALES ⁽²⁾, O. VEROLA ⁽³⁾, A. MULLER ⁽¹⁾

(1) Clinique Vétérinaire Saint-Bernard, F-59160 LOMME France - (2) Laboratoire d'Anatomie Pathologique du Sud-Ouest, F-31201 TOULOUSE cedex 2 France
(3) Hôpital Saint-Louis, F-75000 PARIS France



CLINICAL SIGNS (Figs 1-5)

An eighteen-month-old female Golden retriever was presented for evaluation of dry, scaly skin present since 3 months of age.

Dermatological signs were multifocal linear lesions distributed along Blaschko lines, particularly visible after hair clipping. These were characterised by linear, tightly adherent, exuberant, occasionally verrucous, hyperkeratotic, hyperpigmented plaques affecting the face, ears, trunk and legs. The nose and footpads were not affected. No pruritus was noticed.

No general signs were observed.

Biochemical and haematological profiles were at interval values.

HISTOPATHOLOGICAL FINDINGS (Figs 6-10)

In most biopsies, microscopic examination revealed papillomatous and verrucous hyperplasia of the overlying epidermis and numerous, prominent, irregular, enlarged lobules of mature sebaceous glands opening into a single dilated hyperkeratotic follicular infundibulum via multiple draining sebaceous ducts. Small apocrine glands may be identifiable in the superficial subcutis. The underlying follicular units remain smallish and often appear as isolated hair germs in the deep dermis.

In one biopsy, microscopic examination revealed a dermal lobular masse, sharply circumscribed but unencapsulated, with no connexion with follicular infundibulum nor epidermis. It was surrounded by mature-looking apocrine glands, which exhibited variable epithelial hyperplasia and luminal dilatation, with characteristic decapitation secretion, imparting a peripheral adenoid-cystic architecture.

Central solid areas contained cells arranged in tiny sheets punctuated by ducts. Overt clear cell change, cystic degeneration, squamoid cells with focal keratinization and ductal luminal differentiation were present. The surrounding stroma is fibrocytic. There was no cytologic atypia and no mitotic figures were seen.

DISCUSSION

The histologic findings were consistent with Sebaceous Nevus of Jadassohn (SNJ) distributed along the lines of Blaschko with incidental development of a solid-cystic hidradenoma in an apocrine hamartoma.

Histologically, Sebaceous Nevus of Jadassohn is an organoid hamartoma of the skin that is usually seen at or shortly after birth. The lesion is distributed along the lines of Blaschko and is arrayed in a linear configuration. The lesion represents mature elements of all lines of adnexal differentiation, and shows a wide range of morphological features, depending on the lesion's growth phase.

So SNJ characteristically evolves and changes morphology with time and can be composed of varying admixtures of sebaceous glands, hair follicles, and apocrine glands. Quite commonly, a large variety of appendage tumors, usually benign, may develop within SNJ.

To our knowledge, this case is the first report of a Sebaceous Nevus of Jadassohn distributed along the Blaschko lines in a dog.

References : please contact eguaguere@nordnet.fr

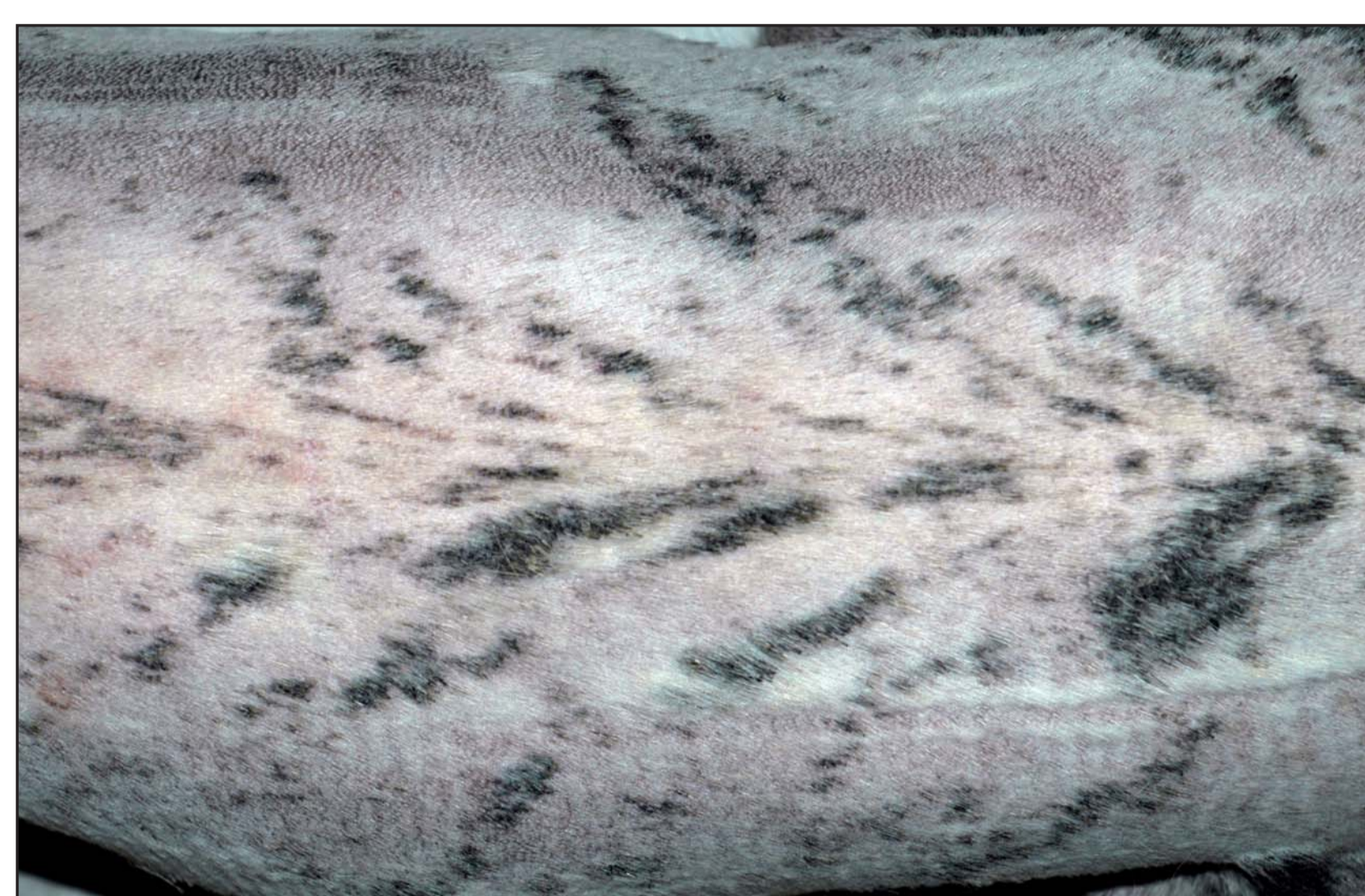


Figure 1



Figure 2



Figure 3



Figure 4

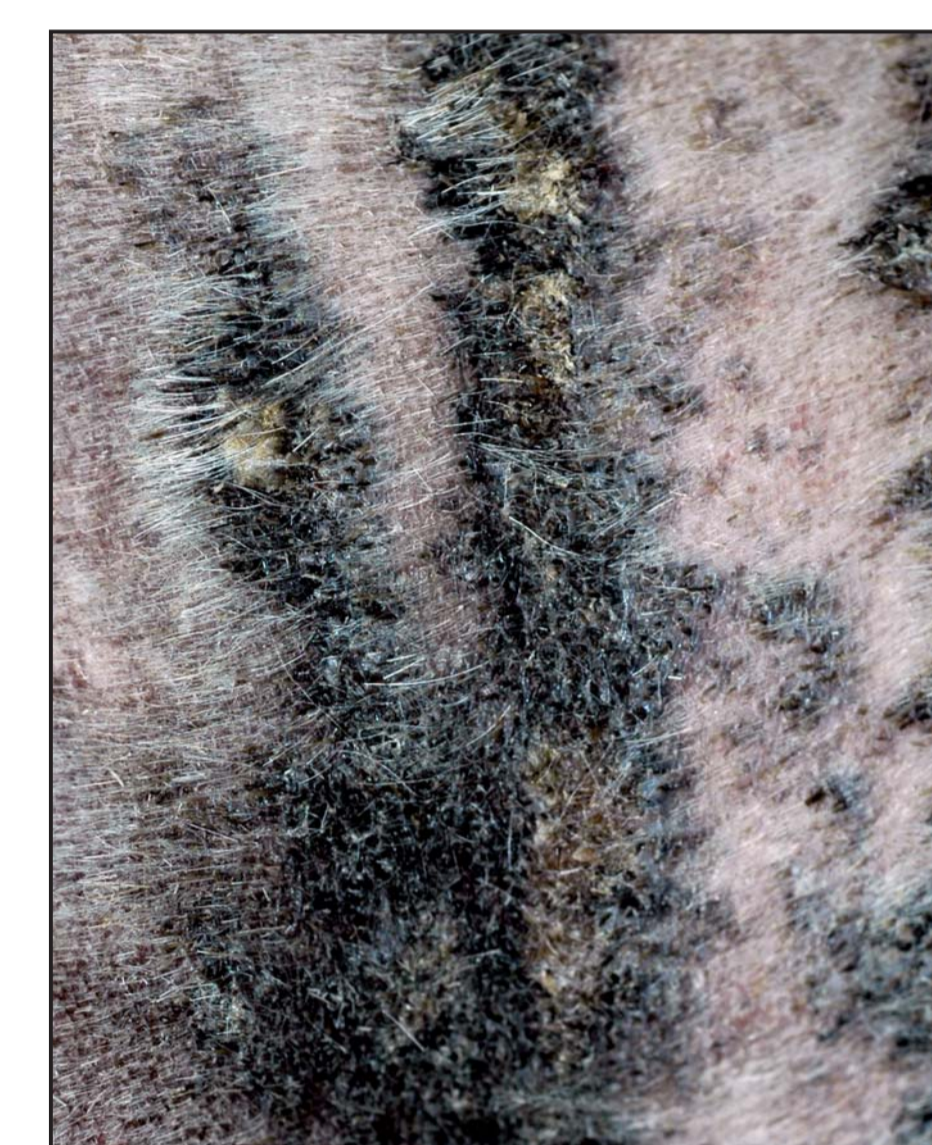


Figure 5

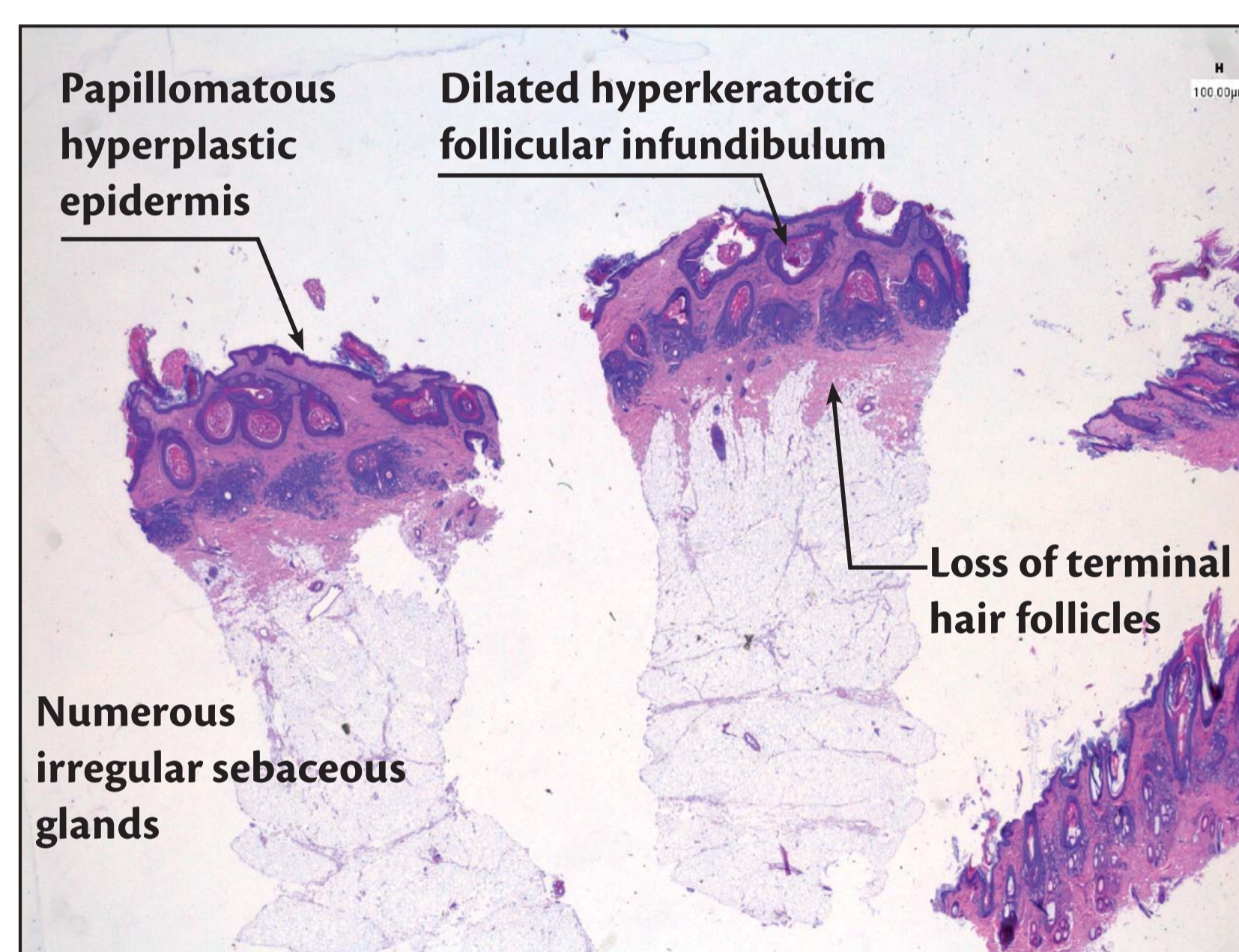


Figure 6: Sebaceous Nevus of Jadassohn. Macro magnification of the slide (scale indicates 100 µm) illustrating multiple large dilated follicular infundibula admixed with numerous irregular mature sebaceous glands, opening into overlying hyperplastic epidermis (formalin-fixed, H&E stained, 4 µm tissue section).

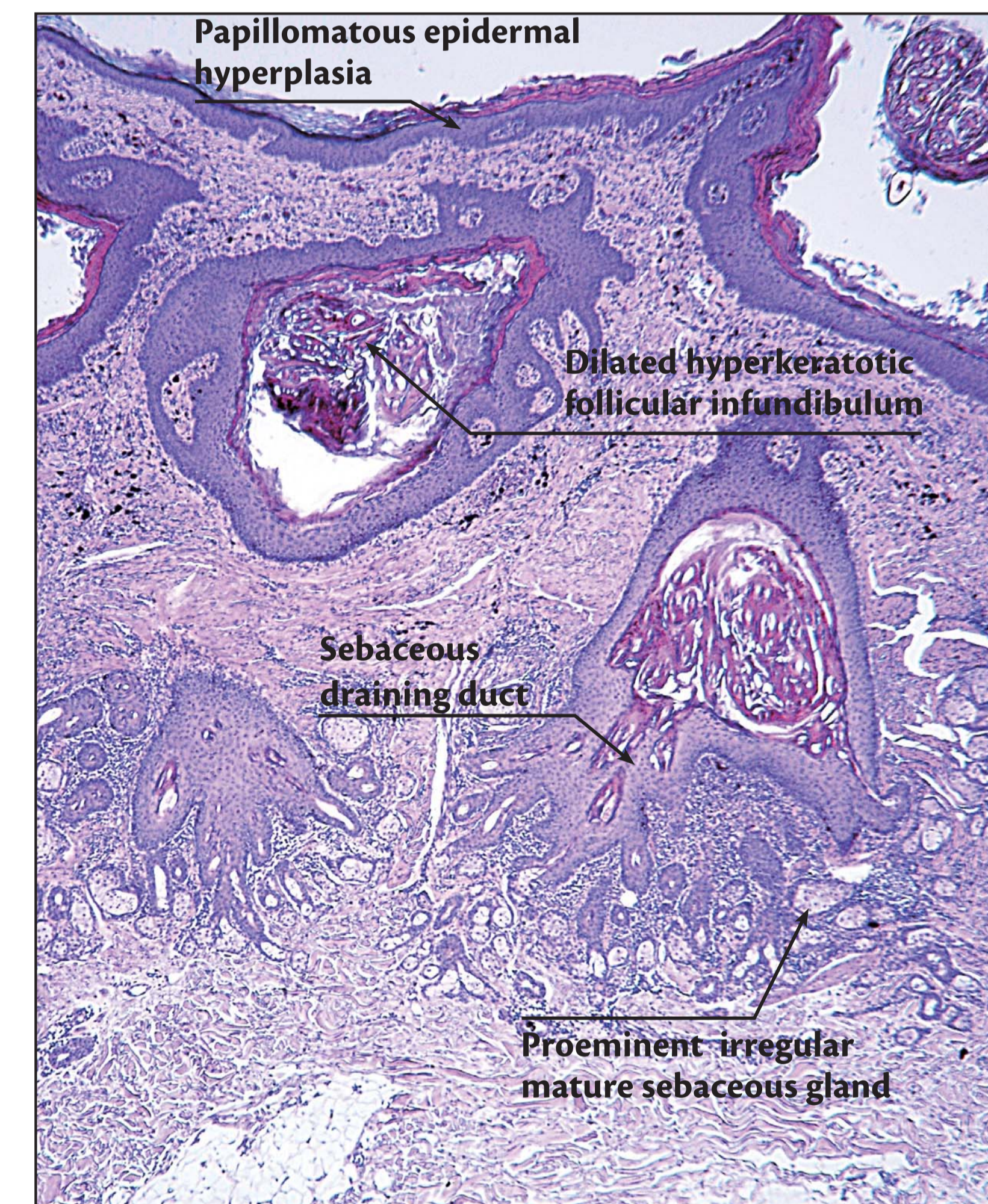


Figure 7: Sebaceous Nevus of Jadassohn. Low magnification photomicrograph illustrating the presence of irregular mature sebaceous glands opening into dilated hyperkeratotic follicular infundibula via numerous ductal structures consistent with sebaceous ducts (formalin-fixed, H&E stained, 4 µm tissue section X 25).

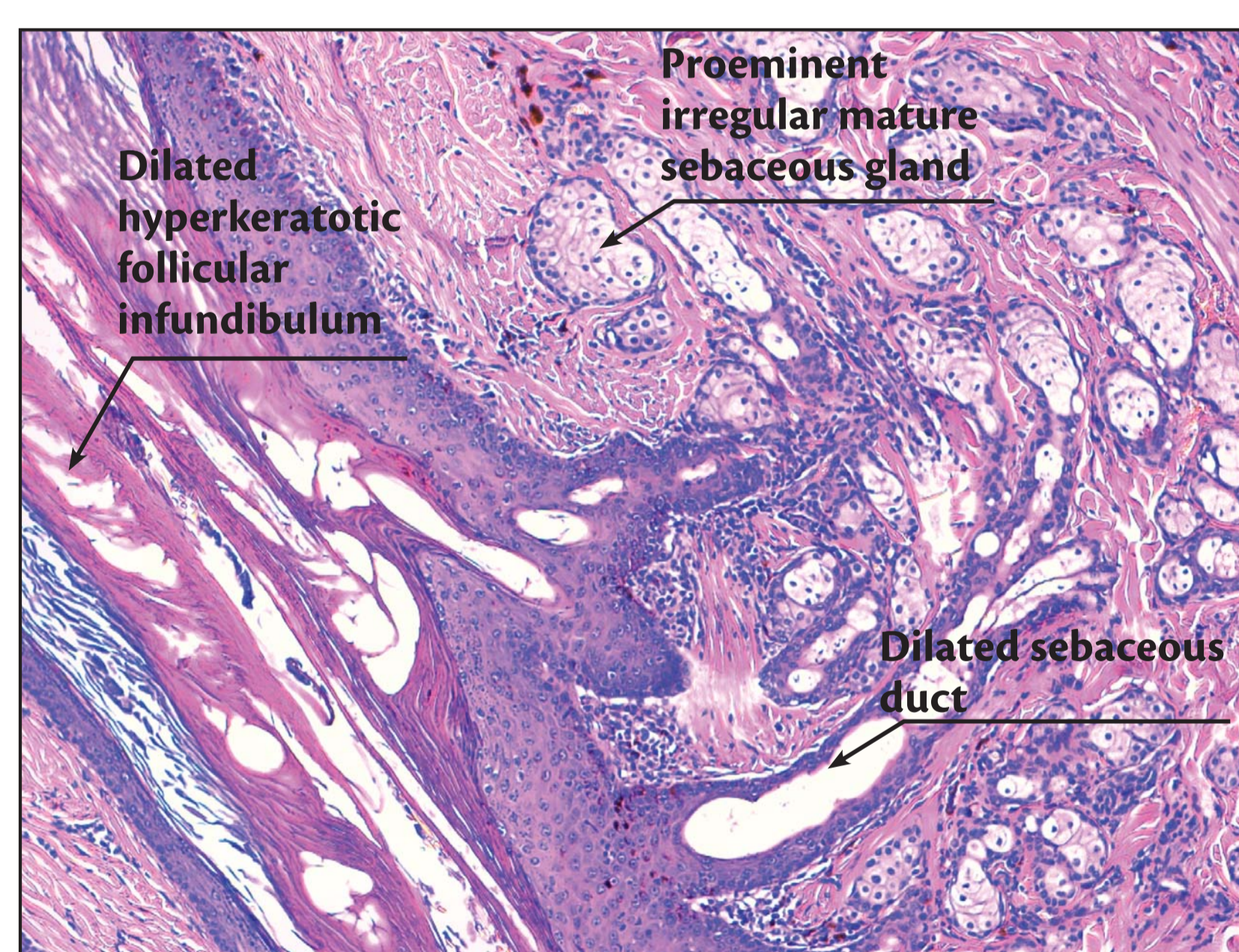


Figure 8: Sebaceous Nevus of Jadassohn. Low magnification photomicrograph illustrating numerous irregular mature sebaceous glands opening into hyperkeratotic follicular infundibulum via dilated sebaceous duct (formalin-fixed, H&E stained, 4 µm tissue section X 100).

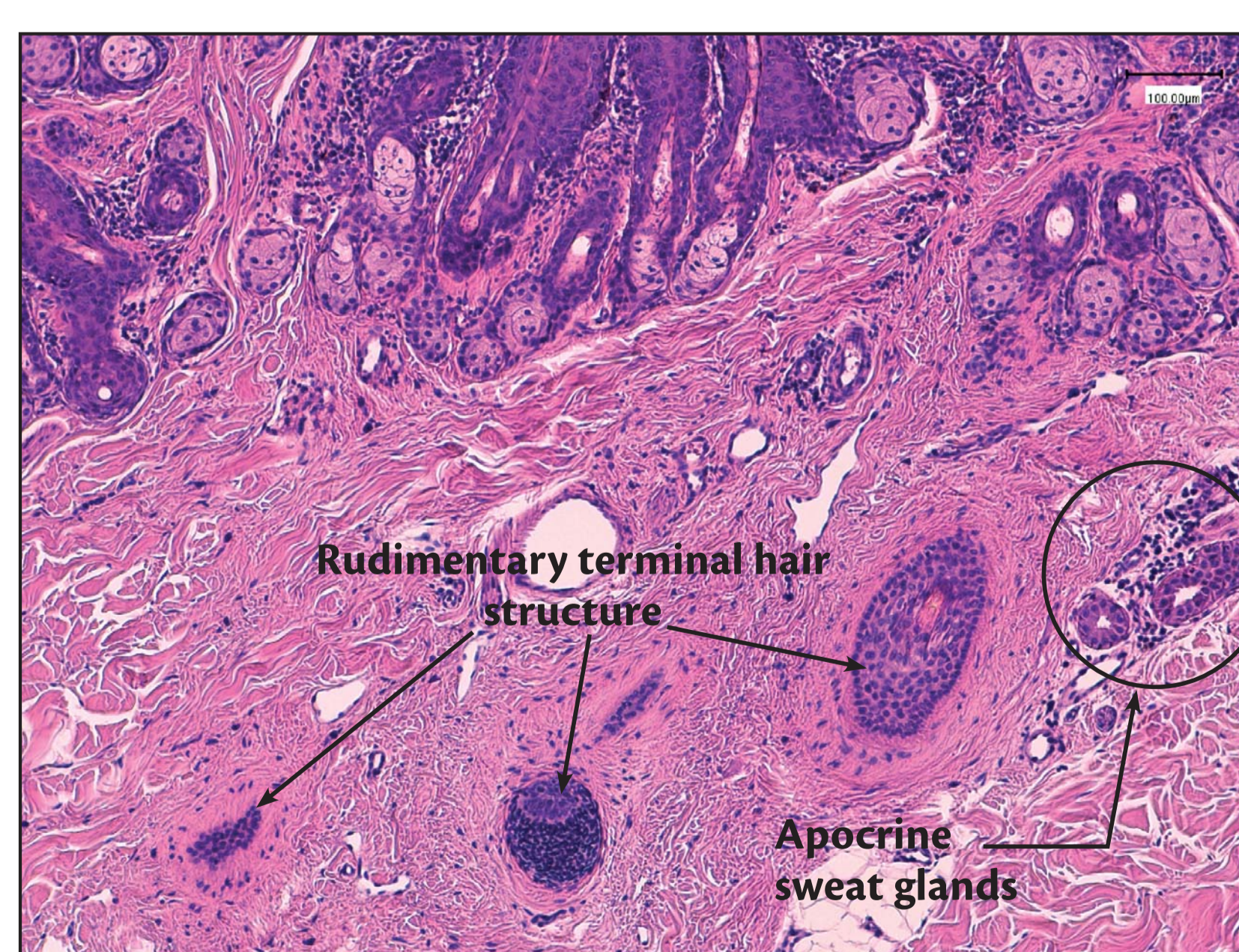


Figure 9: Sebaceous Nevus of Jadassohn. Low magnification photomicrograph illustrating the loss of terminal hair follicles. Few follicles are present in the deep dermis and often appear as isolated hair germs. Note the presence of rare small apocrine sweat glands (formalin-fixed, H&E stained, 4 µm tissue section X 100).

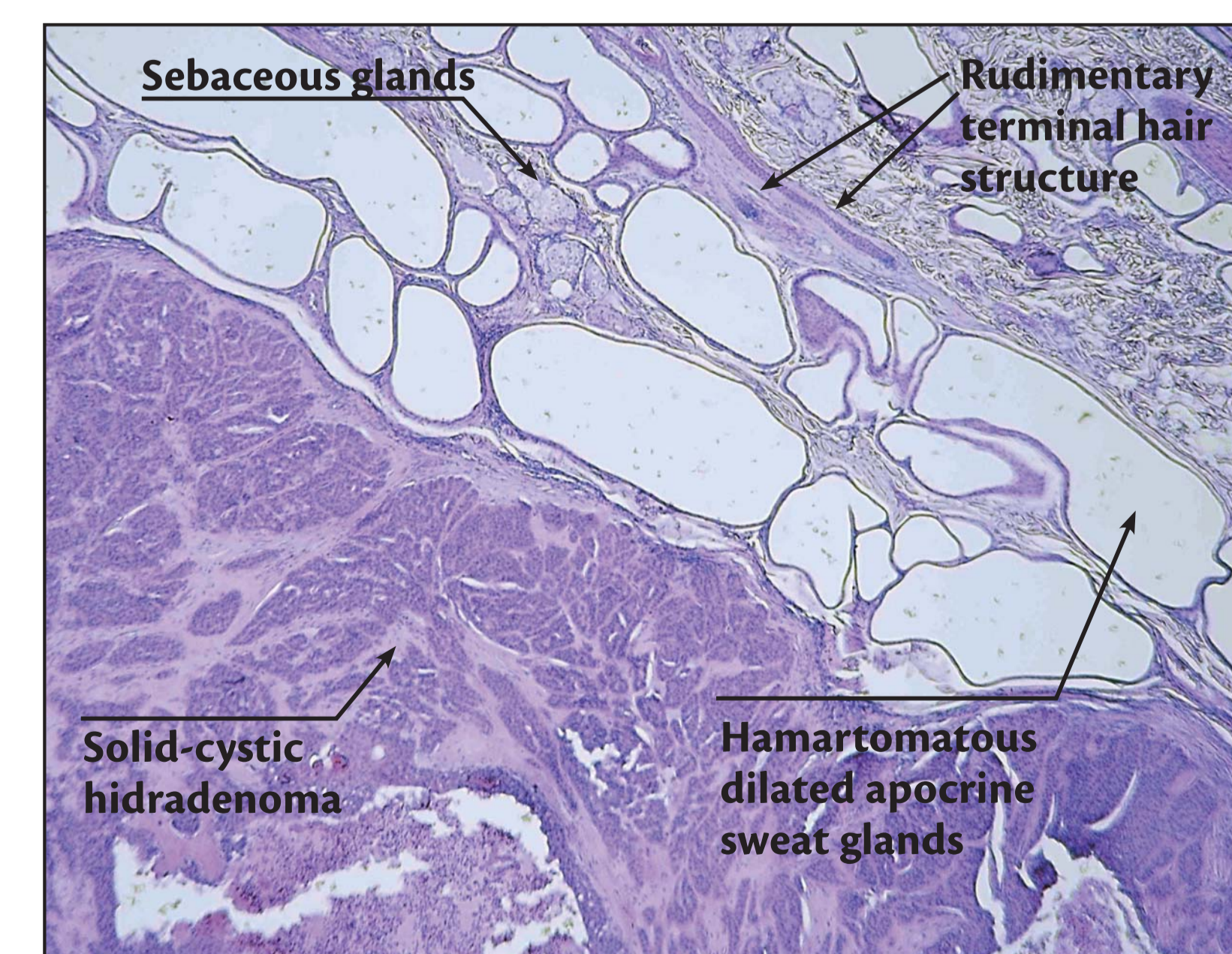


Figure 10: Sebaceous Nevus of Jadassohn. Low magnification photomicrograph illustrating the development of a solid-cystic hidradenoma surrounded by hamartomatous dilated apocrine sweat glands (formalin-fixed, H&E stained, 4 µm tissue section X 25).

CORRESPONDENCE

ERIC GUAGUERE
Clinique Vétérinaire
Saint-Bernard
598 avenue de Dunkerque
F-59160 Lomme - France
Phone: 33 3 20 93 67 55 - Fax: 33 3 20 22 87 32
e-mail: eguaguere@nordnet.fr

