

## COMPOUND NEVUS IN A DERMOID CYST OF THE SKIN

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**ABSTRACT:** *We describe an unusual combined lesion of compound nevus and dermoid cyst of the skin. To our knowledge, there have been no previous reports of these two lesions located together. The combination of these two benign lesions is probably coincidental.*

**Key Words:** *Dermoid Cyst, Melanocytic Nevus.*

### INTRODUCTION

Teratomas are made up of a variety of parenchymal cell types representative of more than one germ layer, usually all three (1). Dermoid cysts are subcutaneous cysts that are usually present at birth. They occur most commonly on the head, mainly around the eyes, and occasionally on the neck. Under microscopic examination, dermoid cysts, in contrast to epidermal cysts, are lined by epidermis that possesses various epidermal appendages which are usually fully matured (2). In ovarian dermoid cysts, the most frequent malignant change is epidermoid carcinoma, followed by carcinoid tumor and adenocarcinoma. Malignant melanoma, some sarcoma types and neuroblastoma are also seen. Some benign lesions such as blue nevus are also described (3).

Melanocytic proliferations are composed of one or more of three types of cells: melanocytes, nevus cells, and melanoma cells, each of which may be located in the epidermis or in the dermis (4). The melanocytes grow in aggregates, or

"nests", along the dermoepidermal junction. Progressive growth of nevus cells from the dermoepidermal junction into the underlying dermis is accompanied by a process termed maturation (5)

### CASE REPORT

A supratrochlear pigmented nodular mass in a 45-year-old woman is presented. Its diameter was 0.6 cm. The clinical diagnosis was melanocytic nevus. It was removed by surgical excision. On the sectioned surface, there was a cystic lesion containing a white creamy material in the lumen. Under the microscopic examination, there were nevus cells forming nests. The cells contained pigment and melanophages were also seen. In the bottom, continuing with the nevoid cells, there was a cystic lesion (Fig. 1). The cyst lumen was made up of multilayered squamous epithelium. The epithelium contained mature epidermal appendages (Fig. 2). The cyst lumen was full of lamellar and granular basophilic material.

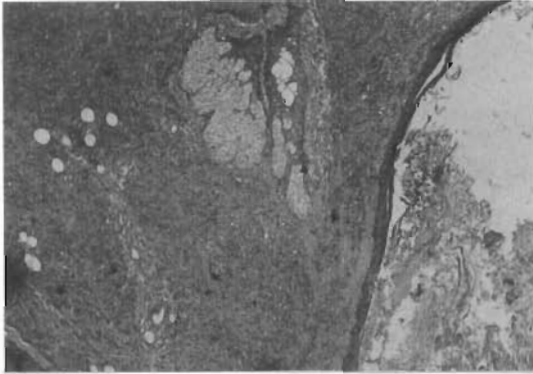


Fig. 1: The wall of the cyst was made up of multilayered squamous epithelium that contains mature epidermal appendages. The cyst lumen was full of lamellar and granular basophilic material (HE, x 40).

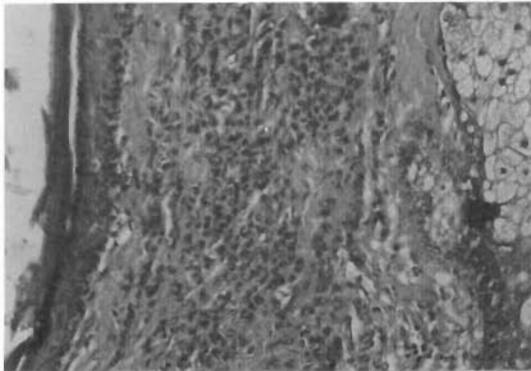


Fig. 2: The lumina and wall of the cystic lesion continuing with nevoid cells at higher magnification (HE, x 200).

## DISCUSSION

Dermoid cyst and melanocytic nevi are two different entities. The nevus is a very common lesion and the dermoid cyst is simply a teratomatous lesion originating from primitive cell rests (1). Accompanying benign and malignant pigmented lesions are described in ovarian mature cystic teratomas (3). The benign lesions are blue nevus (3), benign adnexial tumor

(6) and compound nevus (7). There are also rare cases of accompanying malign melanoma (8).

In the previous case, the gross findings of the lesion was indistinguishable from a conventional melanocytic nevi. It was surprising to find a dermoid cyst lying beneath a melanocytic proliferation. It was hard to tell whether these melanocytic cells originated from the overlying epidermis or from the epithelium of the dermoid cyst. The melanocytic cells existed just beneath the epidermis and also around the epithelium of the dermoid cyst.

To our knowledge, there have been no previous reports of these lesions located together in the skin. In ovarian lesions it raises a question concerning the origin of the melanocyte. In the present case, our view is that the combination of these two benign lesion is probably purely coincidental.

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