Title
Congenital eccrine nevus on the neck

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Authors
Zhang, Yanfei
Feng, Yiguo
Xiao, Shengxiang

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Abstract

Eccrine nevus (EN) is a very rare hamartoma of the skin and with varying clinical manifestations. Histologically, these neoplasms present as a proliferation of normally structured eccrine sweat glands in the dermis. There have been no more than 20 cases previously have been reported in the English literature. Herein we report a 25-year-old man with eccrine nevus on the neck. To our best knowledge, this is the first case that the lesion affecting the neck.

Keywords: eccrine nevus; hamartoma; sweat glands; congenital

Case synopsis

A 25-year-old man presented with multiple papules on the neck. The lesions appeared to be asymptomatic and he denied any genetic diseases in his or his family history. Physical examination showed a sharply defined red patch with multiple papules on the neck; the papules were of various shapes and sizes and showed a bright luster (Figure 1). They were hairless and firm on palpation. Hyperhidrosis was not evident.
Figure 1. Sharply defined red patch with multiple papules on the neck, the papules with bright luster and hairless.

A biopsy was taken from a papule. Histopathological examination showed epidermal hyperkeratosis and acanthosis, perivascular inflammatory cell infiltration in the upper dermis, and proliferation of eccrine glands in the deep dermis (Figure 2). The structure of the eccrine glands appeared normal and some eccrine sweat glands showed dilated coils of normal appearance (Figure 3). Based on the clinical and histopathological findings, eccrine nevus was diagnosed and no treatments were given.

Figure 2. Hyperkeratosis and acanthosis in the epidermis; eccrine duct proliferation in the dermis. (H&E; bar 2mm)
Discussion

EN is a rare, benign clinical entity. There have been no more than 20 cases previously have been reported in the English literature[1]. Histopathological characteristics are normal or show mild hyperkeratosis and acanthosis, with normally structured eccrine proliferations in the dermis. Immunohistochemical examination showed the eccrine coils to be positive for CEA, S-100, CK, and EMA, whereas the ducts are positive for CEA and CK [2]. Clinical manifestations include an erythematous, brownish patch, brownish irregular nodules, and hypopigmented patches. The predilection site is the forearms; other involved sites include, hands, fingers, trunk, back, forehead, and leg. The lesions can be either with or without hyperhidrosis. EN can be differentiated from mucinous eccrine nevus (MEN ) in that EN has no change in vascular structures and is negative for alcian blue staining. The histological features that distinguish eccrine angiomaticus hanartoma (EAH) from EN are the eccrine structures and venous and/or arteriolar structures in the deep dermis and the subcutaneous tissue.

EN is a benign skin tumor. Hence, the main options are observation or surgical excision. If hyperhidrosis is affecting the patients quality of life, treatment with topical glycopyrrolate [3], systemic anticholinergic agents, iontophoresis, and intralesional botulinum toxin may be useful [4].

References