

BECKER'S NEVUS AND IPSILATERAL BREAST HYPOPLASIA

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INTRODUCTION

Becker's nevus, also known as Becker's melanosis or pigmented hairy epidermal nevus, is a fairly common condition seen in all racial groups. This entity was first described by Becker, in two of his patients, as concurrent melanosis and hypertrichosis in distribution of nevus unius lateralis⁽¹⁾. It is about five times more frequent in males than in the females and usually first noticed during adolescence⁽²⁾. Familial cases have also been described⁽³⁾. It manifests as sharply demarcated hyperpigmented patch characteristically situated over the shoulder, anterior chest or scapular region. It enlarges slowly in irregular fashion to give a geographical configuration. The hypertrichosis develops a year or two later in the pigmented area⁽⁴⁾. Occasionally the hypertrichotic element of Becker's nevus never appears⁽²⁾ or may not be evident in early lesions or in fair complexioned individuals⁽⁴⁾. Histological examination reveals that the epidermis is thickened, and the interpapillary ridges and dermal papillae are elongated. The surface may be slightly hyperkeratotic. The basal and suprabasal

keratinocytes are heavily pigmented. A few melanophages are generally present in the upper dermis. The dermis is thickened, and contains numerous, though often inconspicuous, bundles of smooth muscle fibers, unrelated to hair follicles or blood vessels⁽²⁾. We report a 17-year-old female with Becker's nevus and ipsilateral breast hypoplasia.

Case Report:

A 17-year-old female reported for an asymptomatic, gradually progressive, brownish lesion of one year duration on the right shoulder, right arm and adjoining part of right side of the chest. The onset was insidious. None of the other family members were said to have similar lesion. Examination revealed a well defined, irregular, smooth, non-scaly, uniformly brownish patchy lesion in geographical configuration. Hypertrichosis was not present on the affected region. Her right breast was found to be hypoplastic (Fig. 1). The texture of the lesional skin was normal. On systemic examination, no abnormality was detected.

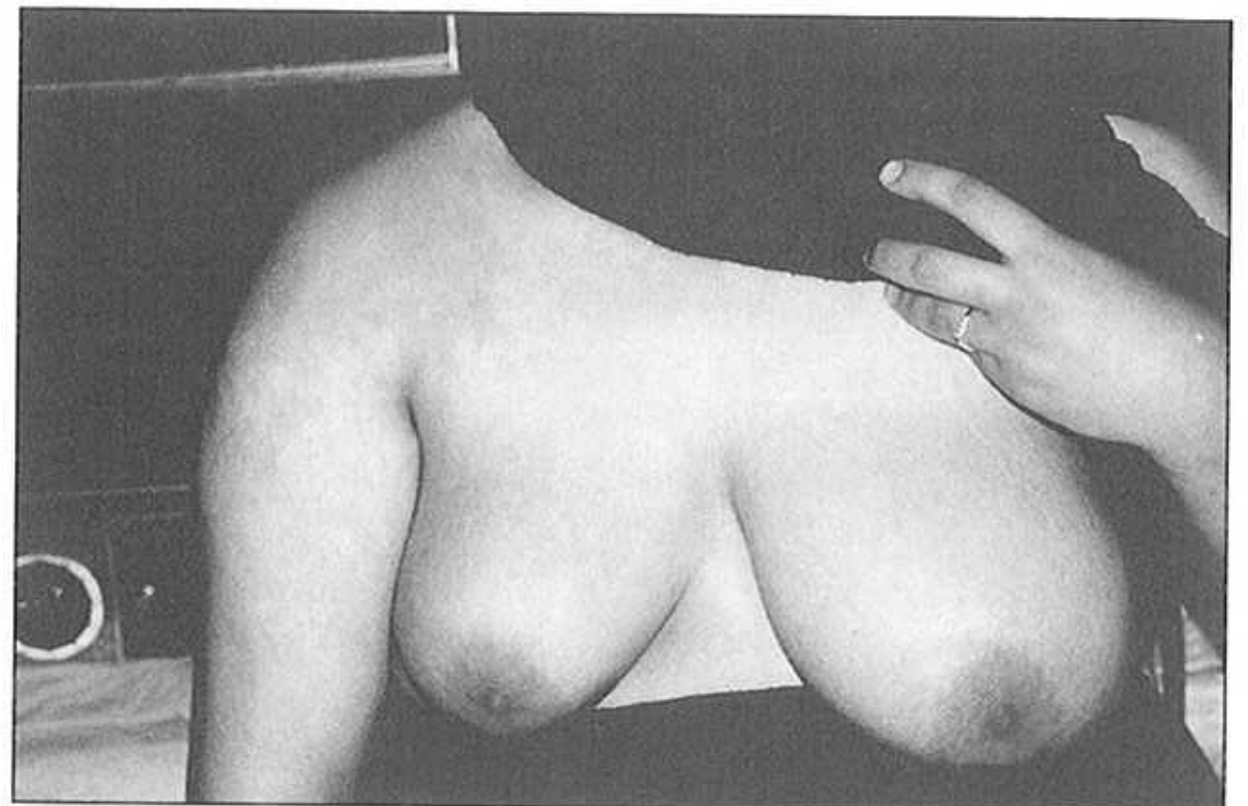


Figure 1: Becker's nevus with ipsilateral breast hypoplasia.

DISCUSSION

In our case also, the Becker's nevus was first noticed at 16-year-age on the characteristic sites. At the time of examination, hypertrichosis was not present in this case too.

Usually Becker's nevi occur without any associated pathology. Sometimes it has been reported in

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association with soft tissue and bony abnormalities. The associated features have been epidermal and dermal nevi⁽²⁾, hypoplasia of breast⁽⁵⁻¹²⁾, limb asymmetry^(5,7,13), scoliosis^(6,11), spina bifida⁽⁷⁾, hypoplasia of pectoralis major muscle⁽⁸⁾, hypoplasia of labium minus⁽¹²⁾, lipoatrophy⁽¹²⁾, smooth muscle hamartoma^(14,15) and accessory scrotum⁽¹⁶⁾. In present case too, ipsilateral hypoplasia of breast was associated with Becker's nevus. This nevus has been seen in our clinics quite frequently. This is the first time we have seen this rare association.

The local androgen hypersensitivity has been suggested as major aetiological factor of this nevus because of its late onset, usually in adolescence, the male predominance and the hypertrichosis. 2 person and Longcope⁽¹⁷⁾, in 1984 reported increased an-

drogen receptors in Becker's nevus. The concentration of androgen receptors in it has been shown to be comparable to that in genital skin suggesting a role for androgen stimulation in Becker's nevus as well as scrotal skin. The association of acquired hypoplasia of the breast and ipsilateral Becker's nevus may explain the role of the presence of cellular receptors to steroid hormones in the ontogenesis and the functional maturation of glandular structures of the skin⁽¹⁸⁾. Formigon et al⁽¹¹⁾ also in 1992, detected high androgen receptor activity of pigmented skin and non detectable receptor activity on the contralateral skin in two patients of Becker's nevus with ipsilateral breast hypoplasia and scoliosis. Increased androgen sensitivity could be responsible for hypoplasia of breast.

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