Kissing or divided nevi are congenital melanocytic nevi occurring on adjoining body areas, produced as a result of separation during embryogenesis. They are rare and have been mostly seen over the eyelids. There are only a few case reports of the kissing nevi of the penis. Becker’s nevus is a common hyperpigmented hamartoma with features of melanocytic, epidermal and smooth muscle hyperplasia, that usually occurs in adolescence on the upper trunk. We describe a case of kissing melanocytic nevus of the penis in a young male with a giant Becker’s melanosis of the leg, an association never reported before in literature.

**CASE REPORT**

A 20-year-old male patient presented to us with complaints of gradually progressive darkening of the skin on the left side of the lower trunk and leg since the past 2 years. The lesion was asymptomatic and associated with overgrowth of the hair at the affected site. There was no family history of similar complaints. On examination, a large hyperpigmented plaque with feathery margins was found unilaterally on the left side, extending from the back on the lumbar area including the lateral aspect of the gluteal area and down to the thigh and the knee. The affected area showed excessive growth of terminal hair (Figure 1 a,b). Genital examination revealed two well defined circular hyperpigmented patches, one of size 2cm X 2cm over the glans penis up to the corona glandis, while the other 1.5cm X 1.5cm over the lateral aspect of the inner side of the prepuce, with the intervening coronal sulcus being completely spared (Figure 2). The two lesions appeared to meet when the prepuce was drawn over the glans. The patient informed that the penile lesions were present for as long as he could remember. Rest of the dermatological and systemic examination was normal.

Routine laboratory investigations including blood counts were normal. Radiograph of the back and thigh was normal. Skin biopsy from the thigh showed acanthosis, elongation of rete ridges, in-
creased pigmentation of the basal layer and dermal melanophages (Figure 3) The patient did not consent for biopsy from the penile lesions. Based on clinical and histopathological findings, a diagnosis of Becker’s nevus with kissing melanocytic nevus of penis was made.

DISCUSSION

Kissing nevus was first reported on the eyelids and around 40 such cases have been described. Other varieties of kissing nevi include the epidermal nevi, mast cell nevi and nevus spilus. Kissing nevi of the penis is very rare; only about 23 cases have been reported so far in the literature. These lesions show mirror image symmetry and all have been described
on the dorsolateral aspect of the glans and the inner surface of the prepuce, with sparing of the coronal sulcus. Divided nevi are believed to be formed prior to the embryonic separation of the adjoining areas during the process of embryogenesis. In the case of penis, the lesion is believed to occur after the migration of the melanoblasts at the 12th week of gestation and before the epithelial placode invaginates and severs to form the prepuce and the glans penis by the end of 13th week of gestation. The predilection for the dorsal side of the penis is explained by the fact that the epithelial invagination occurs first at the dorsal penis and moves to the ventral aspect. Histopathology has shown that these nevi are either intradermal or compound melanocytic nevi. Egberts et al. have reported a case of malignant transformation of kissing penile nevus and therefore, follow up of these patients may be needed. Aesthetic reasons may warrant treatment, which includes options like surgical excision and skin grafting or laser treatment.

Becker’s nevus is a common cutaneous hamartoma that is usually seen in young adolescent males and presents as a unilateral hyperpigmented patch on the upper trunk and proximal upper extremities. Becker’s nevus in our patient was atypical with respect to its location and unusually large size. Males are affected in a ratio of 5:1 compared to females. Hypertrichosis is seen in around 50% cases. It is androgen dependent, suggested by its onset at puberty and presence of hypertrichosis and acneiform lesions at the site. Several musculoskeletal anomalies may be associated with Becker nevus, referred to as Becker nevus syndrome. Becker’s nevus has also been associated with several conditions such as pityriasis versicolor, osteoma, lichen planus, nevus depigmentosus, hypohidrosis, prurigo nodularis, granuloma annulare, skin malignancies etc.

Though considered as a type of organoid epidermal nevus by most experts, classification of Becker nevus is controversial. It has been considered by various authors as a type of organoid epidermal nevus, melanocytic nevus or a smooth muscle hamartoma. Histology of Becker’s nevus does not show the presence of nevus cells, rather smooth muscle hamartomatous picture may be seen. Eczematous response was described in Becker’s nevus in a case report. Eczematous response is otherwise a documented feature of melanocytic nevi, but the cause of eczema in this report was ascribed to the Wolf’s isotopic response.

‘Twin spotting’ or didymosis refers to the occurrence of two different types of nevi and is believed to occur due to postzygotic crossover producing two homozygous daughter cells which represent stem cells of the two distinct types of nevi and other extracutaneous defects. The theory of non-allelic didymosis is no longer accepted as the origin of the paired nevi from a single postzygotic mutation in a heterozygous state was demonstrated in phakomatosis pigmentokeratotica. However, the concept of allelic didymosis proposed for the occurrence of nevus anemicus and nevus flammeus and cutis tricolor may still hold true. Rodriguez-Diaz et al. described the occurrence of epidermal nevus and Becker’s melanosis in a 16-year-old female and speculated if the co-existence was due to didymosis (which should now be considered as pseudodidymosis).

An association of melanocytic nevus and Becker’s melanosis has not been described in literature to the best of our knowledge. More studies are needed to establish if this association was due to pseudodidymosis or chance alone.

Informed Consent
Written informed consent was obtained from the patient for publication of this case report and accompanying images.

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