

Boy's Dark Side Comes Out



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This 14-year-old boy's family is alarmed by a darkening patch of skin on the right side of his chest and shoulder, which first appeared two years ago. Over the span of a few months, dark hairs grew on the hyperpigmented area.

The family's primary care provider assured them that it was likely benign, but the lack of a specific diagnosis left them concerned. They requested referral to dermatology.

A large portion of the patient's right anterior chest and shoulder is completely covered by uniformly hyperpigmented, hypertrichotic skin, which feels a bit thicker than the unaffected skin. The lesion's borders are quite irregular and uneven; beyond them, no hairs can be seen. The problem is confined to the chest and shoulder; although

the medial border extends to the sternal area, the lower edge stops short of the pectoral area.

The patient denies any symptoms and claims to be healthy in all other respects. There is no family history of similar problems.

The most likely diagnosis is

- a) Congenital melanocytic nevus
- b) Nevus spilus
- c) Becker nevus
- d) Melanoma

ANSWER

The correct answer is Becker nevus (BN; choice "c").

Because the lesion was not congenital, a number of possibilities, including congenital melanocytic nevus (choice "a"), were

ruled out. Another differential item that was eliminated was nevus spilus (choice “b”), a tan congenital nevus covered with darker, punctate macules that usually manifest on extremities. These have little, if any, malignant potential.

And while BN is not associated with malignancy, it is possible for it to co-exist with melanoma (choice “d”). Therefore, atypical BN cases may need to be followed or serially biopsied.

DISCUSSION

BN is unusual but not rare. Also referred to as *Becker melanosis*, the condition affects approximately 0.5% of the population. It primarily manifests in young men during early puberty, although women can develop BN.

Histologic signs of BN include epidermal thickening, elongation of rete ridges, and increased bundles of smooth muscle in the dermis.

Androgen causation is strongly indicated by the condition’s predominance in males and onset at puberty, as well as its associated hypertrichosis and increased density of androgen receptors in affected areas. Variations of the condition can involve the legs, arms, or face. It is possible for BN to manifest without additional hair growth. Hypoplasia of ipsilateral pectoral structures (or the ipsilateral breast in women) has also been reported.

Several types of lasers can be used to lighten the hyperpigmentation and remove hairs. This treatment modality yields variable results. **CR**