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Benign pigmented skin lesions other than melanocytic nevi (moles)

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INTRODUCTION — Benign pigmented skin lesions and melanocytic nevi (moles) are common in children and adolescents. Benign pigmented skin lesions, including lentiginosities, café-au-lait macules, Becker nevi, and dermal melanocytoses (Mongolian spots, nevus of Ota, and nevus of Ito), will be discussed below. Melanocytic nevi and melanocytic nevi variants are discussed separately. (See "[Congenital melanocytic nevi](#)" and "[Acquired melanocytic nevi \(moles\)](#)".)

We present here only the information on Becker nevus:

BECKER NEVUS — Becker nevus, also called Becker melanosis, is a fairly common benign cutaneous hamartoma with epidermal and/or dermal elements [14]. Becker nevi can be present at birth, but the majority are first noticed around puberty. This timing, along with the male-to-female ratio of 5:1, the increase in the number of terminal hairs seen within many lesions, and reports of acne vulgaris localized to Becker nevi has raised the possibility of androgenic stimulation as an underlying factor in their pathogenesis [15].

A Becker nevus classically manifests unilaterally on the shoulder and upper trunk as a tan to brown patch or thin plaque. Less often, lesions occur on the lower trunk, thigh, or in other sites. The margins are usually irregular and break up into "islands" at the periphery ([picture 4](#)); the average diameter is >10 cm. Hypertrichosis is present in approximately one-half of cases [16], and there can be an associated smooth muscle hamartoma (sometimes evident clinically by perifollicular papules that are accentuated by rubbing). Associated developmental abnormalities, such as hypoplasia of the ipsilateral breast or pectoralis major muscle, occur infrequently.

Differential diagnosis — There are several considerations in the differential diagnosis of Becker nevi:

- Clinically, a Becker nevus can be confused with a congenital melanocytic nevus; however, histologically, there are no nevus cells in a Becker nevus. (See "[Congenital melanocytic nevi](#)".)

- Smooth muscle hamartomas have significant clinical and histologic overlap with Becker nevi.
- Plexiform neurofibromas, which often have hyperpigmentation and even hypertrichosis of the overlying skin, may be considered in the differential diagnosis of Becker nevi with an associated smooth muscle hamartoma. (See "[Neurofibromatosis type 1 \(NF1\): Pathogenesis, clinical features, and diagnosis](#)", section on 'Peripheral neurofibromas'.)
- Depending on the location of the lesion and the number of peripheral islands, a Becker nevus without hypertrichosis can be difficult to distinguish from an isolated CALM. (See '[Café-au-lait macule](#)' above.)

Management — Patients with Becker nevi should be examined clinically for associated soft tissue and bony abnormalities. If desired for cosmetic reasons, the hyperpigmented component of Becker nevi can be treated with the Q-switched ruby laser, Q-switched Nd:YAG laser, or fractional resurfacing (although responses are variable and recurrence rates are high), and the associated hypertrichosis with laser-assisted hair removal. (See "[Laser and light therapy for cutaneous hyperpigmentation](#)", section on 'Becker's nevus' and "[Removal of unwanted hair](#)", section on 'Laser and intense pulsed light'.)

SUMMARY

Becker nevus is a benign cutaneous hamartoma with epidermal and/or dermal elements. Most Becker nevi are first noticed around puberty ([picture 4](#)), but some are apparent at birth. Considerations in the differential diagnosis of Becker nevus include café-au-lait macule, congenital melanocytic nevus, smooth muscle hamartoma, and plexiform neurofibroma. (See '[Becker nevus](#)' above.)

PICTURES (PICTURE 4)

Becker's nevus (Becker's melanosis)



Note the hypertrichosis and "islands" of hyperpigmentation.

Courtesy of Jean L Bolognia, MD, and Julie V Schaffer, MD.

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