

Ink Spot Lentigo

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A 55-year-old white male presented with a darkly pigmented lesion on his back. The lesion was first noted a few years ago and was asymptomatic. He was a retired construction worker. His past health and family history were not contributory.

Physical examination revealed a dark macule with a markedly irregular spider-like, wiry outline on the back. The lesion measured 3 mm x 5 mm in diameter. Multiple solar lentiginos were also noted in the surrounding areas. The rest of the physical examination was normal. Dermoscopic examination revealed a markedly thickened pigment reticular pattern.

Based on clinical and dermoscopic findings, a diagnosis of ink spot lentigo was made. The patient was reassured as to the benign nature of the lesion and no treatment was requested or required.

Discussion. Ink spot lentigo, also known as reticulated black solar lentigo, is a variant of solar lentigo characterized by very dark color and a beaded or wiry, markedly irregular outline.¹⁻³ The condition was first described by Bologna in 1992.¹

Epidemiology. The exact prevalence is not known. Suffice to say, it is an uncommon condition and the literature on this condition is limited to case reports. The prevalence is more common in fair-skinned individuals.² The peak age of onset is between 30 and 40 years.^{1,3} The condition is more common in males.²

Pathogenesis. Ultraviolet exposure may have an important role to play since ink spot lentiginos are more common in sun-exposed areas on a background of solar-damaged skin, individuals with fair skin, and individuals with a history of sunburns.^{2,3}

Histopathology. The characteristic histological features of ink spot lentigo include lentiginous hyperplasia of the epidermis, melanocytes mainly around the rete ridges, "skip" areas lacking pigment that involve the suprapapillary epidermis, and rete ridges.¹⁻³

Clinical manifestations. Clinically, an ink spot lentigo usually presents as a solitary, reticulated black macule with a wiry or beaded, markedly irregular outline, reminiscent of a spot of black ink on the skin.¹ The size of the lesion is often less than 5 mm. The lesion is most commonly found in sun-exposed area, with the trunk being the most common site.¹ There are usually solar-induced freckles, solar lentiginos, and actinic keratoses in the surrounding areas.^{2,3}

Diagnosis. The diagnosis is mainly a clinical one and can be aided by dermoscopy. Dermoscopic findings include a monomorphic, reticular pattern with a characteristic beaded or spider-like wiry outline.² Skin biopsy is occasionally



warranted if the diagnosis is in doubt and to establish a definitive diagnosis (eg, to rule out melanoma).

Differential diagnosis. Because of its dark color and irregular border, an ink spot lentigo has to be differentiated from a melanoma. In general, an ink spot lentigo is relatively symmetrical, macular, smaller, and stable in size as compared to a melanoma. A history of rapid increase in size, shape, and color of a preexisting or new nevus is suggestive of a melanoma. Other differential diagnoses include dysplastic nevus, solar lentigo, ephelide (freckle), and flat seborrheic keratosis.

Treatment. An ink spot lentigo can be aesthetically bothersome. This is particularly true if the lesion is in an exposed area.

The condition is benign and asymptomatic. As such, treatment is primarily for cosmesis. Treatment options include most commonly excision and, less often, laser surgery or intense pulsed light.

Sun avoidance during hours of peak ultraviolet intensity (11 AM to 4 PM) and the use of broad-spectrum sunscreens and protective clothing when outdoors may help to prevent appearance of a new lesion and worsening of the existing lesion. ■

REFERENCES:

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