Blue Nevus with Satellitosis Mimicking Malignant Melanoma

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Blue nevus rarely develops a malignant melanoma. The loss of the regular border and the development of satellite lesions are ominous clinical indicators of the malignant change. A case is presented in which both of these clinical features—irregular border and satellite lesions—were present, but no malignant change was observed histopathologically. To our knowledge, such a single nodule with satellite lesions mimicking malignant melanoma has not been described previously.

A common blue nevus rarely needs a differential diagnosis with malignant melanoma. Nevertheless, we have observed a case in which the irregular borders and the presence of satellites raised this question.

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Case Report

A 66-year-old man was admitted to the emergency care unit because of ischemic myocardiopathy and ventricular tachycardia. After electric reversion, he was maintained on anticoagulant therapy. A blue-black nodule on the scalp was noted on presentation. As confirmed by the patient, this lesion had been present for at least 50 years, and it was completely asymptomatic.

Physical examination revealed a hard, painless, bluish-black nodule (Figure 1). It was 18 × 15 mm in diameter and showed an oval silhouette and a subtle targetoid pattern, with a blue-brownish center, a clear marginal ring, and a peripheral blue border in the margin. The clear-cut border was poorly defined in one of the poles, in which a diffuse extension was observed. In addition to this large lesion, four additional bluish dots were disposed in the vicinity. Neither the patient nor his siblings could confirm how long these dots had been present.

The lesion was excised *in toto* with the suspicion of a malignant melanoma versus a common blue ne-

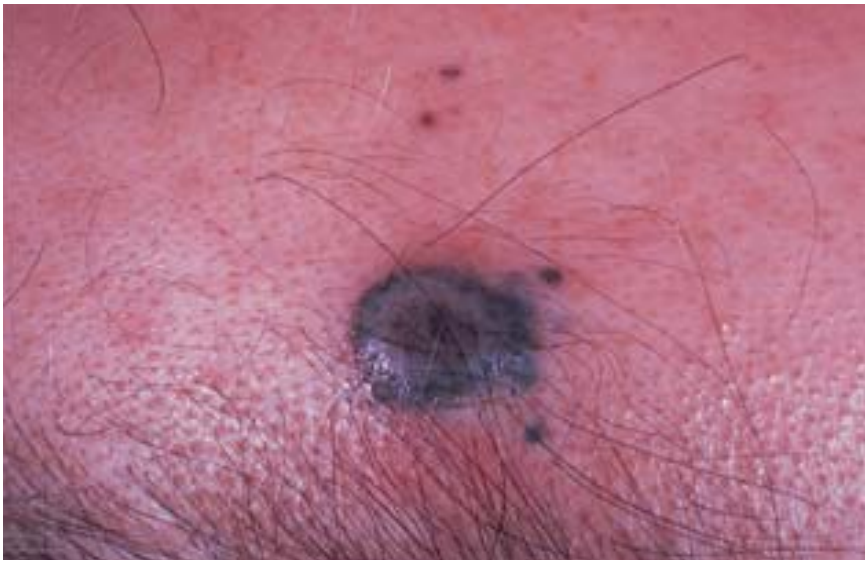

FIGURE 1. An oval, slightly targetoid nodule is seen in the center of the main nodule. One of the poles of the lesion shows an irregular border. Two small dots are seen in the proximity of this asymmetric area and two other satellite bluish-black dots are seen at 2 cm of the border.

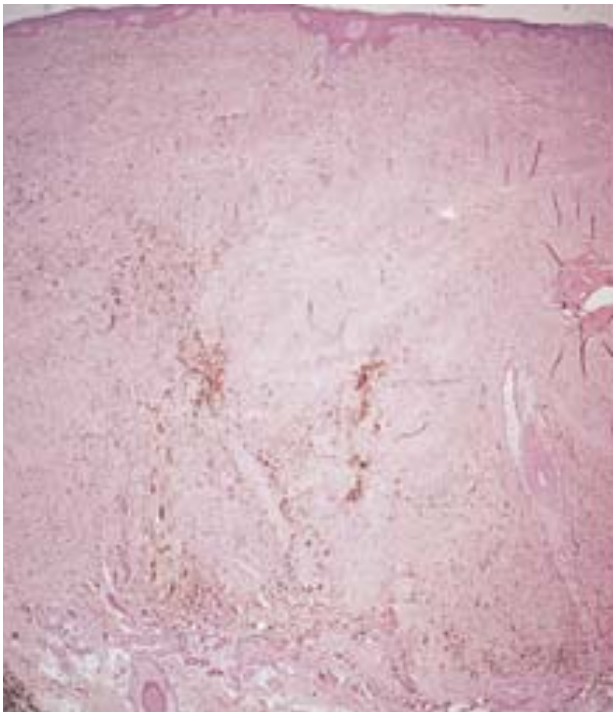

FIGURE 2. Histologic view of the main nodule. Note the elongated melanocytes dispensed along the reticular dermis with no architectural or cytologic malignant change (H&E; original magnification, × 100).

vus. The satellite lesions were also excised. Neither the central lesion nor the satellites showed any malignant change (Figures 2 and 3).

Comments

Although the term "malignant blue nevus" has been repeatedly used in the literature,[1-3] it is a misnomer. In fact, it is a very rare variant of malignant melanoma developed in a pre-existing common or cellular blue nevus and should be better regarded as a true malignant melanoma rather than a malignant blue nevus. The most common location of these malignant lesions is the scalp, and it usually affects only men. This condition commonly shows an aggressive course,[2] with a tendency to local recurrence and distant metastasis.[3]

Some of the reports in the literature that illustrated a malignant melanoma developed on a blue nevus showed a central nodule with a poorly defined border and irregular satellites in proximity.[1,2] In accordance with these features, the most common clinical profile of this condition should be as follows: a long-standing blue nodule on the scalp of an elderly man, with recent changes, such as loss of the clear-cut border and the development of satellite lesions. All of these features were present in our case. Nevertheless, the histopathologic examination of the excised specimens revealed no malignancy.

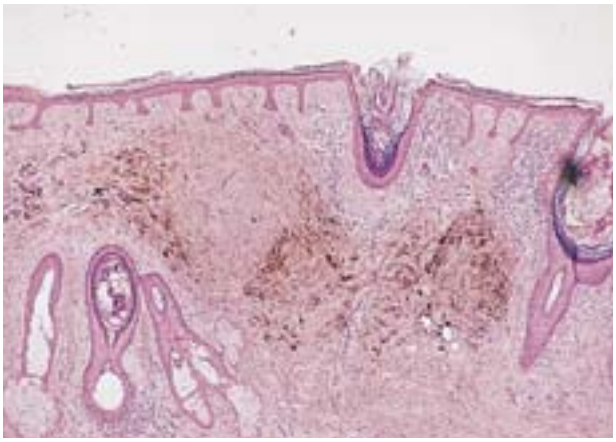

FIGURE 3. Satellite nodules show the histopathologic appearance of a common benign blue nevus (H&E; original magnification, × 40).

Blue nevi are usually solitary, round-to-oval papules or nodules, 5 to 15 mm in diameter. Rare cases of multiple, agminated,[4] or plaque-type[5] blue nevi have been reported. The term "eruptive blue nevi" also has been suggested in one patient in which a common sunburn seemed to develop multiple blue nevi in the same area.[6] However, to our knowledge, no single nodule of blue nevus with adjacent satellitosis has been reported as a benign lesion.

The presence of these satellites and the poorly defined border in one of the poles of the main lesion lead to a high suspicion of a malignant melanoma, which made excisional biopsy mandatory. We agree with the assessment by English *et al*[2] that pigmented lesions compatible with blue nevi that increase in size or become multinodular, especially if on the scalp, require a surgical excisional biopsy. Nevertheless, as demonstrated in this report, the presence of such features in a blue nevus does not always imply the malignant nature of the clinically atypical lesion.

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