

Could This Lesion Be Deadly?

For years, this 24-year-old woman has had an asymptomatic lesion on her upper arm. Aside from growing a bit, as she has, it has remained basically unchanged.

The bluish black, intradermal, planar nodule is located on the lateral right deltoid. Barely palpable, the 7-mm lesion is neither tender nor particularly firm.

The patient is otherwise healthy. Her type IV skin shows little evidence of sun damage.

The most likely diagnosis is

- Malignant melanoma
- Kaposi sarcoma
- Angioma
- Blue nevus

ANSWER

The correct diagnosis is blue nevus (BN; choice “d”).

Some BNs can mimic melanomas (choice “a”), and vice versa. These cases often have to be sent to consultants, and sometimes even *they* can’t agree. For this reason, there is a low threshold for removal if there’s any question of change or family history of melanoma—which were missing in this case.

Kaposi sarcoma (KS; choice “b”) is a type of cancer caused by human herpesvirus-8 that affects the inner lining of blood vessels and manifests with dark macules or nodules. But outside the context of HIV/AIDS, KS is quite rare.

This lesion could have been an angioma (choice “c”), but its history and dark blue color made that diagnosis unlikely. In younger patients, angiomas are typically bright red. Only later, in the sixth and seventh decades of life, do they take on a dark appearance.

DISCUSSION

BNs are benign melanocytic nevi that typically appear on the trunk or upper extremities during the second or third decade of life. There are several varieties, the most

common of which (and the type seen in this case) is *Jadassohn-Tieche*. The steel-blue color and planar surface of this patient’s lesion are typical.

Histologically, BNs are composed mostly of pigmented melanocytes that congregate deep in the dermis (unlike normal melanocytes, which typically line the dermo-epidermal junction). While these melanocytes are usually brown, they take on a bluish hue when they develop on a deeper level of skin—a phenomenon known as the *Tyndall effect*.

It can be challenging to differentiate a BN from a melanoma, even with a microscope. Sometimes the answer is to treat the lesion as though it were a melanoma by excising it with wide margins.

In this case, given the benign appearance and history, the decision was made to leave it alone unless it changes. Excision might have been a good option, but the patient’s type IV skin and the lesion’s location made scarring a likely possibility.



Joe R. Monroe, MPAS, PA, practices at Dermatology Associates of Oklahoma in Tulsa. He is also the founder of the Society of Dermatology Physician Assistants.



CR