



DERMATOPATHOLOGY

SILDENAFIL AS A CAUSE OF MELANOCYTIC SKIN LESIONS REVISITED: AN ADOLESCENT MALE WITH A RAPIDLY GROWING NEVOCELLULAR NEVUS

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Background: An 18-year-old Caucasian male presented to our dermatology clinic with a chief complaint of a growing lesion on his left shoulder. The lesion was a 1x1.5x1.5 cm nodule that had been consistently growing in size for the past 3 months. The patient had no significant past medical history except for the use of sildenafil twice weekly for the past five years having obtained it from his uncle.

Observation: An excisional biopsy was taken. Histopathology showed a nevocellular nevus, part of which showed nevus tissue surrounded by a large, dilated thin-walled vessel. No dysplasia was noted. A Melan-A immunostain confirmed the diagnosis. The patient subsequently had a complete resection of the lesion with clear margins, without any known recurrence.

Key Message: These histopathological changes were similar to changes we had previously noted in melanomas of patients taking sildenafil. Sildenafil is a phosphodiesterase type 5 inhibitor indicated, among other things, for erectile dysfunction. The mechanism of action of the drug is vasodilation of cutaneous vessels through relaxation of vascular smooth muscle cells. We have hypothesized that the vasodilation of these vessels allows increased blood flow to the melanocytic lesion and thus promotes accelerated growth.

