An 8-year-old Girl With an Enlarging Papule on the Eyelid

An 8-year-old Caucasian girl presented with a 4-week history of an enlarging papule on the left lower eyelid. The area began as a pinpoint papule that was thought to be a scratch. There was no other history of preceding trauma. The child was asymptomatic. The papule was not painful and had never bled. It was enlarging rapidly.

Physical examination revealed a 7-mm slightly pedunculated deep red papule on the left lower eyelid (see image above). No other physical findings were noted.

Annette M. Wagner, MD
DIAGNOSIS
Pyogenic granuloma

DISCUSSION
A pyogenic granuloma is the most common acquired vascular tumor of the skin and mucous membranes in children and young adolescents. It also is seen with increased frequency in women during pregnancy.

Typically, lesions present as small bright-red papules that rapidly enlarge over days to weeks to form slightly pedunculated or sessile nodules. Careful examination of the base of the growing papule often reveals a collarette of peripheral scale. The epidermis overlying these lesions is very fragile, and even minor trauma can result in superficial ulceration and bleeding. Bleeding is brisk, and direct pressure for 5 to 10 minutes usually is required for cessation. This is what typically brings patients to medical attention. After bleeding, the papule often is crusted and may be difficult to recognize. Without treatment, regrowth generally occurs over several weeks.

The cause of pyogenic granuloma is unknown. Lesions typically occur on body areas that are most subject to trauma, such as the face, fingers, and forearms, and even minor trauma can result in superficial ulceration and bleeding. Spitz nevi and amelanotic melanoma comprise atypical melanocytes rather than endothelial cells. They also grow rapidly and occur in similar locations in children. The typical growth phase for one of these lesions is growth to a 6- to 8-mm size over a 6-month period, however, rather than the 3-week period that is typical of a pyogenic granuloma. In addition, bleeding is unusual in these lesions.

Treatment for a pyogenic granuloma is shave excision with electrodesiccation to help prevent recurrence. Excision may be required for lesions in certain locations, such as eyelids or mucosa, to reduce the risk of recurrence. Pulsed dye laser can be effective if lesions are treated early, and continuous wave/pulsed carbon dioxide laser has also been used effectively.

The epidermis overlying these lesions is very fragile, and even minor trauma can result in superficial ulceration and bleeding.

REFERENCES