### Photo Quiz

# What Is the Reddish Vascular Lesion on This Boy's Cheek?

Alexander K. C. Leung, MD, and Benjamin Barankin, MD

5-year-old boy was noted to have a vascular lesion on his left cheek. The lesion had been present for slightly longer than one year. He was asymptomatic. His past health was unremarkable; in particular, there was no history of tea-colored urine or liver disease.

Physical examination revealed a reddish lesion with radiating telangiectasia on the left cheek. Compression on the center of this asymptomatic lesion caused the entire lesion to blanch. The lesion quickly refilled once the pressure was released.

The rest of the physical examination findings were normal. In particular, there were no signs of systemic diseases.

## What is this lesion? Is it benign or concerning?

Are you ready to make the diagnosis? Test your clinical diagnostic acumen by visiting **PediatricsConsultant360.com/PhotoQuiz** and join the discussion, share your reaction, and challenge your skills with more Photo Quiz articles. We'll print the outcome of this case presentation in next month's issue of *Consultant for Pediatricians*.

Alexander K. C. Leung, MD, is clinical professor of pediatrics at the University of Calgary and pediatric consultant at the Alberta Children's Hospital in Calgary.

**Benjamin Barankin, MD,** is medical director and founder of the Toronto Dermatology Centre.



Turn the page for last month's Photo Quiz answer. ►

#### Photo Quiz

#### Last Issue's Answer: Benign Spider Angioma

Alexander K. C. Leung, MD, and Benjamin Barankin, MD

The vascular lesion with radiating telangiectasia on this 5-year-old boy's left cheek is a spider angioma. The patient was reassured that the condition is benign and that treatment is only for cosmesis.

Spider angioma is a type of telangiectasia characterized by a dilated central feeding arteriole and radiating branches that together suggest a spider's body and legs. The feeding arteriole is an aberrant branch of the superficial vascular plexus, which communicates directly with dilated superficial capillary branches.<sup>1</sup>

The lesion blanches when pressure is applied to the central arteriole. It quickly refills once the pressure is released. The size usually is less than 2 cm in diameter. The site of predilection is the face, followed by the neck, the upper chest, and other sun-exposed areas. Rarely, spider angiomas are found on the mucosa of the oral cavity and the gastrointestinal tract.<sup>2</sup>

The exact etiology of spider angioma is not known. It is believed that estrogen excess, vasodilatation with hyperdynamic circulation, vascular endothelial growth factor, basic fi-

broblastic growth factor, and substance P play roles in the pathogenesis.<sup>3-5</sup>

Spider angiomas are seen in 10% to 15% of healthy children and adults.<sup>3</sup> The condition is more common in pregnant women and in women who use oral contraceptives for a prolonged time. In such circumstances, angiomas are few in number and usually resolve with time. Other predisposing factors include skin phototypes I through III and a history of significant sun exposure.<sup>1</sup>

Numerous spider angiomas are seen in patients with alcoholism, chronic liver disease, hepatopulmonary syndrome, Klinefelter syndrome, and estrogen-producing tumors.<sup>3,6</sup> Rarely, spider angiomas may been seen in patients with hypertrophic osteoarthropathy, thyrotoxicosis, and rheumatoid arthritis.<sup>3</sup>

Treatment should be directed at the underlying cause. In healthy individuals, treatment usually is not necessary other than for cosmetic reasons. In such cases, spider angiomas can be treated with electrocoagulation, intense pulsed light therapy, or pulsed dye laser treatment.<sup>1</sup>



Alexander K. C. Leung, MD, is clinical professor of pediatrics at the University of Calgary and pediatric consultant at the Alberta Children's Hospital in Calgary.

**Benjamin Barankin, MD,** *is medical director and founder of the Toronto Dermatology Centre.* 

#### REFERENCES

- Ozyurt K, Colgecen E, Baykan H, Ozturk P, Ozkose M. Treatment of superficial cutaneous vascular lesions: experience with the long-pulsed 1064 nm Nd:YAG laser. *ScientificWorldJournal*. 2012;2012:197139.
- Sood A, Midha V. Spider angiomas in the gastrointestinal tract. Trop Gastroenterol. 2000;21(2):77.
- Hane H, Yokota K, Kono M, Muro Y, Akiyama M. Extraordinarily large, giant spider angioma in an alcoholic cirrhotic patient. *Int J Dermatol.* 2014;53(2):e119-e121.
- Li C-P, Lee F-Y, Hwang S-J, et al. Role of substance P in the pathogenesis of spider angiomas in patients with nonalcoholic liver cirrhosis. *Am J Gastroen*terol. 1999;94(2):502-507.
- Li C-P, Lee F-Y, Hwang S-J, et al. Spider angiomas in patients with liver cirrhosis: role of vascular endothelial growth factor and basic fibroblast growth factor. World J Gastroenterol. 2003;9(12):2832-2835.
- Silvério Ade O, Guimarães DC, Elias LF, Milanez EO, Naves S. Are the spider angiomas skin markers of hepatopulmonary syndrome? *Arq Gastroenterol.* 2013;50(3):175-179.