## Soft, Fluctuant Lesions on Head May Not Be a Port Wine Stain

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DESTIN, FLA. — A soft, fluctuant lesion near the midline of the forehead or on the scalp might look like a port wine stain, but it could be a serious, potentially fatal condition known as sinus pericranii.

Maintain a high index of suspicion for such lesions, Dr. Bari Cunningham advised at a meeting sponsored by the Alabama Dermatology Society.

Dr. Cunningham, of the University of California, San Diego, described a case involving an adolescent boy who presented with a complaint about comedomal acne of the forehead. During examination of the patient, an astute colleague noticed what appeared to be a vascular stain on his glabella.

It is essential to be on the alert for such lesions because they can be associated with catastrophic outcomes, such as hemorrhage, infection, and air emboli.

The patient noted that the stain had been present since birth, and that it was not a concern for him. However, when the physician had him lie down, the lebecame sion puffy, swollen and blood filled—a sign

that this was not the "run-of-the-mill port wine stain," Dr. Cunningham said.

On magnetic resonance imaging, the lesion was found to be sinus pericranii—a rare disorder described in the literature as being "characterized by a congenital or acquired epicranial blood-filled nodule of the scalp that is in communication with an intracranial dural sinus through dilated diploic veins of the skull" (J. Am. Acad. Dermatol. 2002;46:934-41).

Sinus pericranii can be congenital, spontaneous, or traumatic in origin, Dr. Cunningham noted, explaining that the condition can result from incidental increased intracranial pressure from something as innocuous as a sneeze or cough in a predisposed individual, or from traumatic delivery. One recent report involved a child with PHACES (posterior fossa anomalies; facial hemangioma; arterial, cardiac, and eye anomalies; and sternal cleft anomalies), suggesting that the condition does not necessarily occur in isolation.

The nodules associated with sinus pericranii can connect from anywhere on the skull or scalp—including in the midline of the forehead—through the intracranial dural sinus (usually the saggital sinus). Some patients complain of vertigo, headache, and localized pain in association with the condition, but others—such as the adolescent she described—remain asymptomatic.

It is essential to be alert for such lesions because they can be associated with catastrophic outcomes, including hemorrhage, infection, and air emboli, particularly when surgery is performed for the misdiagnosis. In some cases, several liters of blood have been encountered intraoperatively, with fatal outcomes from sinus pericranii that was misdiagnosed.

"Just be aware," Dr. Cunningham said. If sinus pericranii is suspected, imaging and appropriate referral to a neurosurgeon is necessary to avoid misdiagnosis and subsequent, potentially fatal, surgery, she said.



