Children and Vascular Birthmarks

You probably see birthmarks regularly in your practice as 10 percent of children have them. While these vascular anomalies might concern many parents, 90 percent of birthmarks do not need treatment, just ongoing observation. Here's what you need to know about the different types of vascular birthmarks and when you should refer your patients to a specialist.

TYPES OF VASCULAR ANOMALIES

There are two main types of vascular anomalies: tumors and malformations. The most common benign vascular tumor is the infantile hemangioma, also called strawberry hemangioma, which occurs in up to 5 percent of children and more commonly in premature female infants. Congenital hemangiomas are less common. Vascular malformations may occur in the veins, arteries, smaller vessels and lymphatic vessels.

MOST COMMON FORMS

- "Angel's kisses" (forehead and eyelids) usually disappear by the time a child is two years old; "stork bites" (back of the neck) may last into adulthood.
- Infantile hemangiomas are benign and may have a tumor-like appearance. Parents may become concerned when these marks become visible in the first few weeks after birth and grow rapidly for about six to nine months before regressing on their own. If the hemangioma is large, on the face, bleeding, interfering with vital functions or a potential cosmetic concern, early referral is appropriate. Most medical therapies are more successful during the early stages of growth.
Port-wine stains are flat pink, red, or purple marks which can be seen at birth, often on the face and neck, but can appear in other areas as well. They continue to grow as the child grows and do not go away. Laser procedures can be used to diminish their appearance.

### WHAT ARE SOME OF THE LESS COMMON TYPES?

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Diagnosis</th>
<th>Treatment</th>
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<tbody>
<tr>
<td>Arteriovenous Malformations (AVM)</td>
<td>Abnormal tangle of blood vessels that grow steadily. May feel like a firm mass under the skin and does not compress easily. Large malformations can stress the heart.</td>
<td>Ultrasound, MRI or angiography</td>
<td>Embolization, sclerotherapy, surgery</td>
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<tr>
<td>Kaposiform Hemangioendotheliomas (KHE)</td>
<td>Aggressive tumors in the skin, deep soft tissue and bones. Commonly are found in the upper chest, arms and legs. Usually are present at birth but can appear shortly afterward.</td>
<td>MRI</td>
<td>Steroid therapy, then chemotherapy if needed</td>
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<td>PHACE Syndrome</td>
<td>Combination of a large hemangioma (&gt;5cm) usually on the face or neck with one or more other abnormalities of the brain, heart, arteries or eyes.</td>
<td>MRI, MRA, echocardiogram</td>
<td>Management of different anomalies and hemangioma-directed therapy</td>
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<td>Venous and Lymphatic Malformations</td>
<td>Abnormally developed venous or lymphatic channels result in excess fluid accumulation in both the tissue and vessels. Prominent enlargement if close to the skin’s surface.</td>
<td>MRI</td>
<td>Sclerotherapy, surgery</td>
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For complex procedures, a comprehensive multidisciplinary approach is best. The Vascular Lesion Clinic at Riley Hospital for Children at Indiana University Health provides experience in specialties such as dermatology, hematology/oncology, interventional radiology, otolaryngology and plastic surgery, as well as coordination of a variety of support services.
WHERE CAN I SEND MY PATIENTS FOR MORE INFORMATION?

Two excellent websites are:

- [http://www.hemangiomaeducation.org](http://www.hemangiomaeducation.org)
- [http://www.novanews.org](http://www.novanews.org)

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