

Worrisome Hemangiomas Require Intervention

BY DOUG BRUNK
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CORONADO, CALIF. — “Some of the most painful and troublesome hemangiomas I’ve taken care of are those in the genital area,” Dr. Sheila Fallon Friedlander said at the annual meeting of the Pacific Dermatologic Association. “They are extremely painful and often require intervention.”

Other worrisome hemangiomas include those which cause visual obstruction, airway obstruction, deformation, and friction, said Dr. Friedlander, section chief of dermatology at Rady Children’s Hospital–San Diego.

She added that segmental or patterned hemangiomas are likely to become problematic, and that multiple lesions raise the issue of possible visceral involvement.

Other worrisome hemangiomas include those which appear in the lumbosacral area. “That could indicate tethered spinal cord and spinal dysraphism, so I worry about that,” Dr. Friedlander said. “There have also been several articles describing pelvic or sacral syndrome: anomalies of the pelvic or genitourinary organs if you have a hemangioma that’s plaque-like and large in the anogenital area.”

The prevalence of infantile hemangiomas is not clear, but it appears that 1%-2% of newborns will have such a lesion. When children are followed out to 1 year of age, the prevalence is 10%-12%. “Fortunately for them and for us, most of these lesions never cause a problem,” said Dr. Friedlander.

About one-third of hemangiomas are present at birth but most develop during the first few months of life. Sometimes the first sign is a white vasoconstricted area of skin. “But over time the area will become red and then become protuberant,” she said. “If you watch it long enough it will grow for the first 6-12 months of life, it will stop growing, and it will eventually improve. Fortunately, that’s good news. So remember: You can be consulted about a lesion in an infant that just looks like a vasoconstricted or white area, but it may be an early hemangioma.”

Dr. Friedlander noted that traditionally experts have stated “30% of hemangiomas fade away by age 3, 70% by age 7, and 90% by age 9.” When the affected child reaches age 4 or 5, “we get a sense of those lesions which



Children who develop ulcerated lesions, such as this one in the perianal region, may be in great pain.

are going to go and those which are going to stay,” she said. “The standard in our office is to tell families to definitely return around 4 years of age before [the child starts] kindergarten to see what it looks like.”

Research on the etiology of hemangiomas continues to evolve. To date, high-risk patients include those with large facial plaque-like hemangiomas, preemies, twins, and infants born to mothers with abnormalities in the placenta.

Large plaque-like lesions, particularly of the face, warrant a careful physical exam, eye exam, an echocardiogram, and often an MRI/magnetic resonance angiography of the head.

The goal of treatment is to prevent function-threatening events such as disfigurement and to minimize psychosocial distress, “but you don’t want to do something very aggressive early on that’s going to lead to scarring which was unnecessary,” Dr. Friedlander said.

Systemic prednisone at a dose of 2-5 mg/kg per day is indicated for patients with symptomatic troublesome lesions. Dr. Friedlander said that flavored agents “taste a lot better than regular generics.” She uses Orapred syrup (prednisolone sodium phosphate) which comes in a concentration of 15 mg/5 mL. She usually starts with a dose of 2 mg/kg per day as one early morning dose with food.

Patients usually require months rather than weeks of



Large, plaque-like lesions of the face warrant an echocardiogram and possibly MRI/MR angiography.

therapy. Approximately 30% of lesions will shrink, another 40% will stop growing but may not shrink, and the remaining 30% may not respond, even if the steroid dose is increased. “It is important to monitor blood pressure and growth during treatment,” she said. “At our center, we treat these children with H₂ blockers to prevent gastric irritation, and make certain that they are aware of the risks of severe varicella infection if they are exposed to this virus. If that occurs, they should receive oral acyclovir.”

Other treatment options include topical class 1 steroids such as clobetasol for thin lesions, and intralesional corticosteroids such as triamcinolone acetonide. “These can be very useful for discreet lesions but you need to be careful around the eyes,” she emphasized. “There have been some reports of central retinal or ophthalmic artery occlusion and blindness. For that reason I refer to ophthalmology if periorbital injection is required.”

Laser treatment of infantile hemangiomas is controversial, but she said that it makes a “tremendous difference” in children who develop ulcerated lesions in the groin area. “These kids are in horrendous pain,” she said. “For many of them, one or two laser treatments will expedite healing such that they are no longer in pain.”

Dr. Friedlander said she had no conflicts of interest regarding products mentioned in her presentation. ■

PHOTOS COURTESY DR. SHEILA FALLON FRIEDLANDER & CHILDREN’S PEDIATRIC DERM SPECIALISTS, SAN DIEGO

Hemangiomas: Closely Monitor, Classify, and Look Beyond Skin

BY DAMIAN McNAMARA
Miami Bureau

TORONTO — Closely observe a baby with a hemangioma in the first few weeks to months to monitor for any progression, and be cautious with laser treatment, Dr. Alfons Krol said at the annual conference of the Canadian Dermatology Association.

Knowing whether a malformation is likely to rapidly involute will help to guide management. Lasers, he said, can increase complications and should be reserved for the final stage of a multimodal approach.

Classification is important. A rapidly involuting congenital hemangioma (RICH) can be fully formed at birth. “These things can rapidly disappear. They regress and deflate very rapidly,” Dr. Krol said. “I use the cooking analogy of a soufflé that collapses in the center.”

Hemangiomas in distal areas such as the fingers and feet tend to involute more rapidly than lesions elsewhere. “This is something that has not been well appreciated in the literature,” he said.

Some hemangiomas involute slowly, taking anywhere from 2 to 10 years to spontaneously curl inward. Others are not

apparent at birth, and postnatal growth may start at 3-12 months. For example, perineal or lip ulcerations that present shortly after birth almost always turn out to be hemangiomas, said Dr. Krol, director of pediatric dermatology at Oregon Health & Science University, Portland.

Hemangiomas “can be small but of great concern to parents. Make sure parents understand they should report any sudden growth between appointments,” he said.

In contrast, noninvoluting congenital hemangiomas (NICH) “behave more like a malformation. They tend to grow with the child and do not involute [Plast. Reconstr. Surg. 2001;107:1647-54],” Dr. Krol said. “The only way to treat them is to remove them with surgery.”

Dr. Bernice Krafchik of the Hospital for Sick Children in Toronto asked Dr. Krol if he could tell the difference between a RICH and a NICH.

“They can look similar,” he replied. “Basically, one starts off large and never gets better—it grows with the patient. You can say that is a NICH.”

The clinical implications of a hemangioma go beyond the skin, and can include

the liver, central nervous system, and gastrointestinal tract. “The teaching point here is with the 5-point scoring system,” Dr. Krol said. If the score is 4 or greater, 63% have airway involvement and about 40% will require tracheostomy. He recommended starting oral steroids while these patients are on their way to an otolaryngology consultation.

“If patients have multiple hemangiomas—more than five or six present—there is an increased risk of hemangioma in other areas, such as the liver,” Dr. Krol said. Scan other areas, including the central nervous system, if the liver is positive, he suggested.

Treatment of hemangiomas includes topical or intralesional steroids for select focal lesions. Oral steroids are indicated for life-threatening or function-threatening lesions, 2-4 mg/kg for 4-8 weeks, with a gradual reduction tapered over 2-3 months.

“Alpha interferon is another option, but there are more side effects,” Dr. Krol said. Petrolatum applied daily to the surface can minimize secondary changes, including ulceration, he said.

Pulsed-dye lasers held early promise for

treatment of hemangiomas, “but we now understand that if the lesion is destined to have that deep component, lasers are of little benefit. This makes sense because the laser goes superficially,” he said.

In one study, 121 patients treated with pulsed-dye laser experienced improved redness on the surface, but there was no difference in complete clearing or resolution for laser group versus observation (Lancet 2002;360:521-7). Skin atrophy and hypopigmentation were significantly higher in the laser treatment group. “So certainly [laser treatment] has the potential to increase complications,” Dr. Krol said.

“Lasers are best as part of a multimodal approach to ‘mop up’ after completion of other therapy,” he said. One potential indication is after surgery for debulking of a hemangioma to improve any significant telangiectasia.

There are some surgeons who will approach these hemangiomas early in life, Dr. Krol said. “If you have a good surgeon and it’s technically feasible, I don’t think we have to wait as long as we told patients in the past for surgery,” he said. “Children become self-aware around age 3 years, so I use that as a guide.” ■