

## Hemangiomas

Hemangiomas are strawberry-colored “birthmarks.” They are not rare, and vary from tiny blebs to large and multiple tumor-like growths. They are not true birthmarks since they are mostly not seen at birth, but start in infancy and then begin to grow. Hemangiomas first appear from birth up to 18 months then slowly shrink. Port wine stains and other true birthmarks are fully formed at birth and do not grow wider.

Doctors disagree over how hemangiomas should be dealt with. The answer may depend on whether you see a Dermatologist, Plastic Surgeon or other specialist. Because many of the smaller birthmarks resolve on their own with no intervention, most doctors agree that you should leave small hemangiomas that are not growing alone, especially if they are on skin normally covered by clothing.

Hemangiomas that require early aggressive treatment include those that are cosmetically deforming, growing rapidly or obstructing vision, hearing, breathing, eating or any other body function. Hemangiomas on the lower face and neck may later block internal airways. Large facial hemangiomas may cause psychosocial impairment. Also, larger hemangiomas that are left alone to regress (shrink away over years) will eventually look better if the resulting saggy, stretched out skin and fatty tissue are surgically removed.

Most hemangiomas when first diagnosed are superficial only. These can be treated with a laser as soon as they are diagnosed, and early treatment is key as laser becomes less effective if you wait. The laser selects the red and shrinks the vessels so that the result is a less noticeable lesion. Repeated treatments can almost completely remove the superficial component. However, since the laser can only penetrate 1-3mm, it cannot shrink any deep component. Sometimes early treatment will prevent further growth, although deeper portions may still persist and grow. The flash-lamp pulse dye, pump dye and sclero-laser are the primary lasers used for treating hemangiomas. The risk of scarring is small. Complete removal of every trace should not be expected.

Deep hemangiomas have no superficial (or red) part on the surface. They have large, soft, blood filled cavities with a blue hue. Compound hemangiomas have both superficial and deep parts. These are often the largest, spreading all over the face or body or located on the nasal tip, mouth, jaw, etc. These hemangiomas can be treated a number of ways.

If the area is fairly small and not on the face, intralesional injection with steroids with or without liquid nitrogen cryosurgery can be used. If there is also superficial (surface) component, laser can be used to reduce the superficial component along with the steroid injection. Larger hemangiomas require oral steroids. A fairly large dose is needed but infants seem to handle this very well. Many children who are put on steroids will have to go through several trials of dosing-tapering. The current protocol is to put them on the initial dosage for 4-6 weeks and then begin a slow taper. If re-growth is seen, they should be put back on the original dose for another 4 weeks and then begin to taper again. When tapering down no longer encourages re-growth, the children can safely be weaned off the drug.

Many parents worry about the side effects of steroids. Almost every side effect will disappear soon after the drug is discontinued. Moon face is the most common side effect. Immune suppression will also occur and therefore no live vaccines should be given during treatment. Some physicians will prescribe Zantac and Propulsid while the child is on steroids to minimize the chances of reflux and stomach upset. The drug can be given in liquid syrup form or tablets. If the child keeps spitting out the syrup and can eat, even cereal, then switch to the tablets. Crush them up and mix them in the cereal, yogurt, pudding, etc. If any serious side effects occur, which is rare, consult your physician immediately.

Alfa-interferon is recommended for hemangiomas that do not respond to steroids and if the lesion is problematic or life threatening. Spastic dysplasia has been associated in 10-12% of the children taking alfa-interferon and as a result should be used with extreme caution. Spastic dysplasia can cause delayed walking or other problems with walking.

Immediately after the treatment, you can expect slight redness, swelling, tenderness or an itching sensation in the treated area. This is a normal result of the injection. The discomfort is temporary and generally disappears in a few days. After a lip treatment, the lips may become swollen and look somewhat uneven. Other types of reactions are very rare, but about 1 in 2000 treated patients have experienced localized reactions thought to be of a hypersensitive nature. This can persist for a few days (up to one week). If the discomfort continues, please contact your doctor.

Plastic surgery is indicated for hemangiomas that are life threatening or deforming and did not respond to an appropriate treatment. For facial hemangiomas with no significant reduction in size between 2 and 3 years of age, surgical intervention should be considered, especially if the lesion is disfiguring. Surgery may also be indicated for hemangiomas that have been left alone and do not show signs of shrinkage after a few years. If there shrinkage they may be better left alone, with later evaluation of any scar. Some experts are convinced that watchful waiting and massage therapy (with the parents massaging the area four times daily) is the best treatment.

If surgery is chosen, you will need a surgeon experienced in hemangiomas, as they will bleed. Surgery is almost never a first choice for treatment. Unfortunately, there will be instances where a rapidly growing lesion will not respond to the most aggressive therapy, but these instances are rare. Most hemangiomas have a good outcome if left alone, but as medicine progresses, the benefits of early treatment are outweighing the risks more and more.