A New Approach To Treating Troubling Birthmarks

The Switch From "Watchful Waiting" To Early Intervention

By Joshua Fox, MD

Since the early 1900s, babies born with such disfiguring vascular birthmarks as hemangiomas and port wine stains - and their parents - have traditionally been met with a "hands-off" approach to treatment. But the medical community is slowly switching its tact. from "watchful waiting" to early intervention, diagnosis and often even treatment. The turnaround is based on a combination of a clearer understanding of the medical and emotional consequences wrought by these congenital defects, and the advances in technologies that are well-suited to treat even infants comfortably and safely.

Nearly 40,000 children in the U.S. can benefit from surgical intervention for their birthmarks each year. The good news is that both anesthesiology, microembolization and laser technology have been advanced significantly in recent years, so we can treat children at a much younger age, more effectively and comfortably than ever before. That's important, because – while the term birthmark can seem innocuous enough, — hemangiomas and port wine stains can compromise a child's healthy growth and development, and can sometimes signal more serious medical problems.

For instance, "strawberry" hemangiomas — so named because of their pinkish hue and their typical size and shape — are actually benign tumors that usually grow on the skin. Depending upon their location, strawberry hemangiomas can interfere with

feeding, breathing, vision or proper physical development. Some hemangiomas grow inward, which can put vital organs at risk. What's more, as with all tumors, hemangiomas require a rich blood supply to survive. As babies become more mobile, an injury to the hemangioma can cause excessive bleeding and can result in an emergency room visit for cauterization. More powerful vascular lasers with larger spot sizes, better cooling devices and more wavelengths and varying treatment times have allowed for clearing of port wine stain in half the time of a decade ago with better long term results. Plus, those that were previously resistant to treatment are now responding and patients and their families are thrilled. Also some hemangiomas respond to medication orally and intralesionally including microembolization.

In rare instances, the venous system within the hemangioma becomes so large and demanding that it saps a developing child's much-needed blood supply, taxing the heart and stunting normal growth. Perhaps most importantly, it creates psychological barriers and much social grief for parents and patients.

The new approach to hemangioma treatment includes consultation with a board-certified dermatologist who specializes in lasers as quickly as possible, to secure an early, accurate diagnosis to rule out associated complications and to establish regular monitoring periods.

Yet, the medical evidence is clear:
Almost 90% of hemangiomas do largely shrink on their own by adolescence, at which time laser or cosmetic surgery can address any lingering scarring or remaining lesion. We find that early treatment lessens this residual scarring, discoloration and/or texture changes. However, new surgical techniques, along with advances in laser and cauterization technologies, have made the procedure to remove hemangiomas, which have a high risk of excessive bleeding, safer for those children who require it.

Port wine stains, on the other hand, never fade. In fact, these flat, pinkish "splotches" on the skin at birth are actually a vascular network right below the skin's surface of malformed capillaries that often get larger, deeper and darker purple as the child grows. Port wine stains have traditionally been more challenging to treat, because they are essentially permanent congenital defects. Even as we learn new ways to destroy the capillaries, they simply redevelop. These marks can also be a harbinger of medical troubles. Children born with port wine stains on their eyelids, foreheads and/or scalps are usually given an MRI exam during the neonatal period, because each year about 5% of children with a port wine stain in this general location are diagnosed with Sturge-Weber Syndrome, which can cause glaucoma and developmental delays.

Yet, the continued perfecting of laser

treatments - including the newer, more powerful Pulse-Dye Laser - is giving new hope to patients with port wine stains. Though most stains require 6 to 8 treatments over the course of months to years and sometimes touch ups later in life, about 75% of patients will experience a lightening of the stain that is significant enough to make a difference in their emotional health. That's perhaps the biggest piece of the puzzle surrounding vascular birthmarks. The evidence is clear that, as early as the preschool years, these disfiguring birthmarks can have lasting negative effects on a child's normal emotional development and self esteem, as well as on the parents.

Vascular birthmarks are often a shock to new parents. And this is understandable. But while many mothers blame themselves for their child's birthmarks, parents can rest assured that there is no medical evidence that expectant mothers can prevent them, or that anything an expectant mother does during her pregnancy causes them. What's more, we are better able to address these birthmarks in a way that can reduce their medical and emotional effects than ever before. ©

Joshua L. Fox, M.D. is a leading authority in the field of dermatology with an expertise in skin cancer, cosmetic surgery, and laser procedures. Dr. Fox is the founder and director of Advanced Dermatology and The Center for Laser and Cosmetic Surgery with offices in Manhattan, Queens and Long Island. www.advanceddermatologypc.com.