

A Psychological Profile of Children With Hemangiomas and Their Families

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Objective: To assess the psychosocial impact of hemangiomas and their treatment on children with the disease and their families.

Design: Thirty-nine children who were treated for hemangiomas were examined by a questionnaire that addressed the emotional attitudes of the parent and child toward the disease and the related treatment.

Setting: Two private ambulatory surgery centers (in Latham and Charleston).

Results: Overall, the survey found a negative effect on the child's family, with considerable fear caused in part by adverse public commentary or attitudes—which was ameliorated by education from the primary care provider and specialist. However, the family's perception was

that the child was not deeply affected by his or her condition and that treatment (laser, intralesional corticosteroids, oral corticosteroids, surgery, or a combination) did not change the child's emotional response to the disease. However, most parents observed that their child was too young to appreciate his or her malady.

Conclusion: Given earlier intervention for children with late-involuting hemangiomas and the advent of more effective therapies, our survey did not seem to indicate that the children experienced significant emotional trauma from their condition; nevertheless, their families experienced appreciable emotional and psychological distress.

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HEMANGIOMAS ARE the most common neoplasm of infancy and childhood, with an estimated prevalence of 1% to 3% of all neonates^{1,2} and of 10% of infants by the age of 1 year.^{3,4} Most hemangiomas arise in the head and neck region (60%), and 20% of patients may have more than one lesion.⁵ Given these facts and that hemangiomas may be unsightly birthmarks (**Figures 1, 2, 3, and 4**), the psychological stress on the developing child and family cannot be underestimated. Hemangiomas exhibit a natural history of proliferation during the first year of life—a fact that may only further compound familial anxieties about the child's condition. However, only a few hemangiomas actually require intervention, because they often tend to involute before the age when the child should enter school. Most hemangiomas undergo involution during the second year of life, and may completely regress.

If these often disfiguring vascular lesions do not involute early, they may have profound psychosocial effects on the child

and family, and may lead at times to accusations of child abuse and other misconceptions, as this study will show. In addition, reports of late-involuting hemangiomas have found a high incidence of a marked residual deformity. Although several studies⁶⁻¹² have investigated the impact that port-wine stains, or capillary vascular malformations, have on the child's psyche and the benefit that treatment affords, fewer studies¹³⁻¹⁵ exist that examine the psychological ramifications of hemangiomas on the child and family.

Technological advances in the treatment of vascular lesions have also been remarkable and have kept stride with intellectual gains. Before the introduction of laser therapy, many individuals were left only with the option of cosmetic camouflage. The earlier laser types, the argon and Nd:YAG lasers, often led to undesirable scarring, an adverse effect rarely encountered with the pulsed dye laser. Some researchers¹⁶ still advocate the efficacy of interstitial potassium-titanyl-phosphate and Nd:YAG lasers when treating the deeper component of the hemangioma not ame-

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