Natural history of a nasolabial hemangioma
A evolução natural de um hemangioma nasolabial

Ronaldo Golcman¹, Benjamin Golcman², Murilo Francisco Pires Fraga³

ABSTRACT
Hemangiomas of infancy are unique, benign tumors of endothelial cells characterized by an initial phase of rapid proliferation, followed by slow involution, often leading to complete regression. The aim of this case report is to present the natural evolution of a nasolabial hemangioma based on the progression of the disease, since birth until adult life. Many therapeutic options are available. The appropriate moment to proceed should be identified by the physician taking into account the natural course of the disease.

Keywords: Hemangioma/therapy; Hemangioma/surgery; Lip neoplasms; Nose neoplasms

INTRODUCTION
Hemangiomas are tumors of soft tissue that are more common in infancy; they may be identified in 1.1 to 2.6% of infants born at term. Their frequency is estimated as 10-12% in the first year of life(1-2).

The word hemangioma has traditionally been applied to a range of vascular lesions, but in 1982, Mulliken and Glowacki put forward a biological classification based on clinical manifestations, natural history, anatomical and pathological findings(2). It was defined that hemangiomas are vascular tumors that present a phase of growth, characterized by endothelial proliferation and hypercellularity, followed by involution.

Mulliken and Glowacki recognized that a series of lesions formerly called hemangioma were actually vascular malformations, deriving from capillaries, veins, lymphatics, arteries or combinations of lesions.

Vascular malformations and hemangiomas do not normally occur in the same locations but may occasionally coexist(2).

Females are affected three times more frequently than males, as are premature neonates. Approximately 55% of these tumors are present at birth, and the remainder appears during the first weeks of life(3).

Hemangiomas classically present an initial phase of proliferation followed by slow involution and in many cases complete resolution. The proliferative phase is more pronounced in the first 3-6 months of life, followed by slower growth, reaching their maximum extent at 9-12 months.

Involution occurs at an estimated rate of 10% per year, but approximately 20 to 40% of patients who present involution will have residual cutaneous changes that need surgery to correct sequelae(4).

Using the recommendations put forward by Finn, Mulliken and Glowacki, over 90% of vascular abnormalities may be classified as hemangiomas or vascular malformations by the history and physical examination(5). In a minority of cases the diagnosis may be questioned and use may be made of auxiliary methods such as Doppler ultrasound, tomography and magnetic nuclear resonance.
Treatment is based on the following principles: to preserve life and function, prevent disfigurement, minimize psychosocial stress for the patient and family, avoid the production of scars, and prevent or suitably treat ulcerations, minimizing infections and pain.

The goal of this report is to present the natural evolution of a nasolabial hemangioma, based on the follow-up of the disease from birth to adult life, which provided a satisfactory outcome for physician and patient.

**CASE REPORT**

Female, white patient JCS, born at term, presented a petechial lesion at the tip of the nose and on the upper lip at birth.

The lesion presented a period of progressive growth, and became raised, exuberant and affected the tip of the nose, the columella and virtually the entire upper lip. It evolved with an area of central ulceration on the lip, but without signs of infection. An option was made to treat it clinically using topical bandages (figures 1-4).

Function was not affected at any moment. Involution was observed to begin at roughly two years of age, and was complete at 7 years of age (figure 5). There was a cicatricial sequela that was reviewed at ages 8 and 10, and the outcome was satisfactory for both patient in adult age and physician (figures 6-7).
In the vast majority of cases, the ideal proposed is follow-up and clinical observation, keeping patients and families informed as to the natural evolution of the disease. Mulliken and Young called this principle “primum non nocere”.

Given the involutinal nature of the lesions, clinical or surgical intervention is reserved for cases where function is affected, or where there are hemorrhagic complications, infections or psychological disturbances.

Hemangiomas that obstruct the visual axis, the airways, the auditory canal or hemangiomas associated with congestive cardiac failure, bleeding, infections and severe ulcerations, must be treated actively.

Although watchful waiting is recognized and widely recommended for these lesions, there is pressure from...
parents and family members to take some steps in order to shorten the span of spontaneous involution. However, the physician should provide the necessary support for patients and families and reserve surgical treatment for the opportune moment.

Bowen et al. stated that 25% of patients present some change or local deformity after the maximum extent of involution of the lesion\(^7\). At this moment minor repairs are indicated, which result in less morbidity than a possible early intervention.

In situations where a more rapid and effective initial treatment is necessary, we can use non-specific therapies (excision, cryotherapy, embolization), antiangiogenic drugs (corticoids, interferon) and antiproliferative treatment (chemotherapy and radiation).

Corticosteroids are the first line of treatment. Zarem and Edgerton have reported the rapid involution of massive hemangiomas with the use of systemic corticotherapy\(^8\).

Intralesional injection of long-lasting corticoids is also advocated in certain hemangiomas, particularly those involving the eyelids\(^9\).

White et al. were the first to describe the use of alpha-2a interferon to treat hemangiomas and suggested its use in severe cases where corticotherapy is contraindicated, where there is no response or where there is a complication caused by use\(^10\).

Surgical excision is also indicated for cases where there is obstruction, major ulceration, and in hemangiomas that fail to respond to pharmacological treatment.

Surgery can be used in lesions that have undergone involution and have left sequelae (atrophy or residual tumor).

Other therapeutic modalities with their own specific indications, such as laser, embolization, chemotherapy, radiation, cryotherapy and compression, may be used as complementatory treatment.

From the above we can note that several alternatives are available to treat hemangiomas, and that the physician must recognize the moment to intervene, taking into account the natural evolution of the process.

It often behooves the physician to simply follow the clinical course and provide psychological support to families and patients, waiting for nature to play its role.

REFERENCES


