**Eyelid Fibrous Hamartoma With Conjunctival Angioma in an Infant**

Eyelid lesions are frequently seen in healthy infants. Common diagnoses include viral papilloma, chalazion, molluscum contagiosum, epithelial inclusion cyst, dermoid cyst, and capillary hemangioma. Less frequently recognized eyelid tumors consist of pilomatrixoma, apocrine hidrocystoma, pseudoepitheliomatous hyperplasia, neurofibroma, and choristoma. Characteristics of specific lesions, such as the presence of inflammation, overlying skin discoloration, and mass depth, are often useful in determining a clinical diagnosis.

Fibrous hamartoma of infancy is a benign soft tissue tumor that usually develops in the first 2 years of life and is not distinctive clinically. It has been reported most commonly in the axilla, abdomen, buttock, chest, and shoulder. We provide the first reported case, to our knowledge, of an eyelid fibrous hamartoma.

**Report of a Case.** A healthy 7-week-old girl underwent evaluation of a presumed left corneal limbal dermoid and left upper eyelid lesion present since birth. She was born at full term, and the results of her mother’s prenatal TORCH (toxoplasmosis, rubella, cytomegalovirus, and herpes simplex) workup were negative. The patient’s parents had noted good visual response to light and toys, with normal eye movements.

At examination, she demonstrated intermittent fixation bilaterally with a reproducible eye-popping reflex. She had full motility without nystagmus. Bilateral levator function was normal. External examination revealed a 5 × 4-mm white, dome-shaped lesion with a reddish base, located along the left medial upper eyelid between the eyelid margin and crease (Figure 1). There was no associated inflammation or distortion of the eyelid margin. The surrounding eyelid structures appeared normal. Additionally, there was an elevated, fleshy, vascular mass involving the inferior bulbar conjunctiva (Figure 2). It measured 9 × 3 mm and was not adherent to the cornea or lower eyelid. The adjacent corneal stroma had minimal haze, and similar smaller lesions were present at the caruncle. She had no evidence of nasolacrimal duct obstruction or lagophthalmos. Slitlamp and dilated fundus examination results were normal. Cycloplegic refraction did not demonstrate induced astigmatism.

An examination under anesthesia exhibited normal intraocular pressure and corneal diameter size. Both the eyelid lesion and the conjunctival mass were excised. The microscopic examination of the upper eyelid specimen disclosed a well-demarcated but not encapsulated nodule occupying the dermis, including the papillary dermis and extending as far as the basal epidermis (Figure 3A). The epidermis showed focal areas of basalloid budding. The nodule comprised the following components: (1) well-defined bundles of intertwining fibrous tissue composed of epitelhioid to spindle cells arranged in parallel; (2) nests of primitive mesenchyme with vesicular nuclei in a myxoid matrix; and (3) mature adipose tissue admixed with thick, wide capillaries and scattered foci of small, dark cells resembling lymphocytes (Figure 3B). There was no mitosis, necrosis, or cellular atypia. Diffuse...
immunoreactivity was present for CD34 (Figure 4A). However, no reactivity was detected for factor XIIIa (Figure 4B) or muscle-specific actin (Figure 4C), confirming the diagnosis of fibrous hamartoma of infancy.

The conjunctival specimen consisted of nonkeratinized stratified squamous epithelium overlying a substantia propria–containing meshwork of vascular lumina lined by a single layer of endothelium (Figure 5). This was suggestive of an angioma.

Comment. Fibrous hamartoma of infancy was first described by Reye in 1956. It is a benign soft tissue tumor that can develop at birth and occurs primarily on the trunk, axilla, or buttock. Rarely has it been found on the face and, to our knowledge, never involving the eye. The vast majority are benign solitary lesions and range from 0.5 cm to 4.0 cm in diameter, with no evidence of famil-
bral or syndrome association. There is a male-female predilection of 2:1. It has been described as freely mobile, well circumscribed, and subcuticular.

Although the clinical characteristics of fibrous hamartoma have been variably reported, it has unique microscopic features. All prior cases consistently report well-defined traversing bundles of dense fibrocollagenous tissue, immature loose-textured mesenchyme, and increased areas of interspersed mature adipose tissue. However, the elements making up the tumor are much more characteristic of a fibrous hamartoma. Diffuse immunoreactivity for CD34 is suggestive of a solitary fibrous tumor. The negative reactivity to muscle-specific actin rules out dermofibromatosis, and confirms the diagnosis of dermatofibroma.6 However, the presence of primitive mesenchymal cells in the underlying nodule may mediate the release of cytokines and growth factors that stimulate the keratinocytes. This leads to a cascade of events that may be responsible for the basalaroid budding of the epidermis. A similar mechanism has been described in dermofibroma.9

Other rare entities in the differential diagnosis include myofibroma, lipofibromatosis, and calcifying aponeurotic fibroma.10 Myofibromas are found in the head and neck region and have light-staining areas and dark, more hemangiopericytoma-like staining areas histologically. The negative reactivity to muscle-specific actin in our specimen rules out myofibroma. Lipofibromatosis consists of abundant adipose tissue traversed by bundles of fibroblasts, without immature mesenchyme. Calcifying aponeurotic fibroma is found interspersed with fat in infants and is composed of calcific areas surrounded by hyalinized collagen and fibroblasts.

The natural history of fibrous hamartoma suggests initial growth that slows with older age. No malignant degeneration or spontaneous regression has been documented. Local surgical excision is successful in most cases, with recurrent growth occasionally noted after incomplete excision.

Fibrous hamartoma is a rare, benign entity that occurs in infants and young children. It rarely involves the face. The lesion can be successfully excised, and its unique histopathologic characteristics are valuable in confirming the diagnosis.

Yasmin S. Bradfield, MD
Amol Kulkarni, MD
Heather D. Potter, MD
Thomas Warner, MD
Daniel M. Albert, MD, MS

Correspondence: Dr Bradfield, University of Wisconsin, Department of Ophthalmology and Visual Sciences, 2870 University Ave, Suite 206, Madison, WI 53705 (ybsbradfield@ophth.wisc.edu).

Financial Disclosure: None reported.


