# Rhabdomyomatous mesenchymal hamartoma presenting as a skin tag in a newborn



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# **INTRODUCTION**

Rhabdomyomatous mesenchymal hamartoma (RMH) is a rare congenital lesion in the dermal and subcutaneous tissues of newborns that was first described as a striated muscle hamartoma in 1986 and named in 1989. Since then, 65 cases have been reported in the literature, some in association with other congenital abnormalities. Most cases have been described in young patients on the head and neck, but cases have also been reported on the tongue, perianal region, vagina, and great toe. On histologic examination, RMH consists of striated muscle bundles, adipose tissue, blood vessels, collagen, and nerves. We report a case of a solitary RMH presenting as a skin tag on the midline chin of a newborn boy.

### CASE REPORT

A 15-day-old boy born at 38 weeks of gestation presented with a skin-covered, smooth, polypoid papule measuring  $0.7 \times 0.5 \times 0.5$  cm protruding from the chin (Fig 1). Histologic examination of the skin tag and subcutaneous tract showed a polypoid portion of benign hair-bearing skin with numerous bundles of normal-appearing skeletal muscle at the core with associated nerves and dense collagen (Fig 2). A diagnosis of RMH was made, and the lesion was excised under local anesthesia. No recurrence has been observed.

## DISCUSSION

RMH is a rare, congenital lesion characterized histopathologically by a disordered array of striated muscle bundles and several tissues of mesenchymal

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Abbreviation used:

RMH: rhabdomyomatous mesenchymal hamartoma



**Fig 1.** Smooth midline polypoid papule on the chin at presentation.

origin such as adipose tissue, blood vessels, and collagen.<sup>6</sup> RMH usually presents as a solitary lesion on the head and neck in infancy or childhood and is slightly more common in boys than girls.<sup>3</sup> The presenting lesions are often described as polypoid, as in our case; smooth papules, nodules, or subcutaneous swellings have also been reported.<sup>4-6</sup> RMH may be associated with congenital anomalies such as Delleman syndrome, ocular abnormalities, amniotic band syndrome, Goldenhar syndrome, cleft lip or gum, nasofrontal meningocele, and spinal dysraphism.<sup>2,3,7</sup> Although the etiology of RMH is

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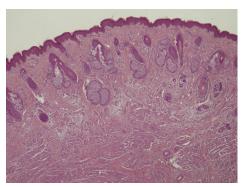


Fig 2. Hair-bearing skin with bundles of haphazardly arranged skeletal muscle and occasional nerves within the dermis and associated with adnexal structures. (Hematoxylineosin stain; original magnification: ×25.)

unknown, possible explanations include aberrant migration of embryonic mesenchymal tissue or abnormal development of mesodermal-derived somite cell populations.

The differential diagnosis of this case included accessory tragus and congenital midline cleft; however, skeletal muscle is never a prominent feature of accessory tragi, and congenital midline clefts usually present on the anterior neck.<sup>8</sup> Surgery is the primary treatment of RMH usually with full recovery and no recurrence, although laser treatment has also been

We report a case of RMH arising as a skin tag on the chin of a male newborn and describe the histologic findings that allow this entity to be diagnosed. RMH should be considered in the differential diagnosis of infants presenting with polypoid lesions, particularly those that are midline.

### REFERENCES

- 1. Mills AE. Rhabdomyomatous mesenchymal hamartoma of skin. Am J Dermatopathol. 1989;11:58-63.
- 2. Rosenberg AS, Kirk J, Morgan MB. Rhabdomyomatous mesenchymal hamartoma: an unusual dermal entity with a report of two cases and a review of the literature. J Cutan Pathol. 2002; 29:238-243.
- 3. Mazza JM, Linnell E, Votava HJ, Wisoff JH, Silverberg NB. Biopsy-Proven Spontaneous Regression of a Rhabdomyomatous Mesenchymal Hamartoma. Pediatr Dermatol. 2015;32: 256-262.
- 4. Hao J, Diao QC, Wang SP, Liang CP, Shi BJ. Rhabdomyomatous mesenchymal hamartoma: case report and literature review. Int J of Dermatol. 2015;54(10):1183-1185.
- 5. Dal Vechio A, Nakajima E, Pinto D, Azevedo L, Migliari D. Rhabdomyomatous (Mesenchymal) Hamartoma Presenting as Haemangioma on the Upper Lip: A Case Report with Immunohistochemical Analysis and Treatment High-Power Lasers. Case Rep Dent. 2013;2013:943953.
- 6. Read R, Burnstine M, Rowland J, Zamir E, Rao N. Rhabdomyomatous mesenchymal hamartoma of the eyelid: Report of a case and literature review. Ophthalmology. 2001;108: 798-804.
- 7. McKinnon EL, Rand AJ, Selim MA, Fuchs HE, Buckley AF, Cummings TJ. Rhabdomyomatous mesenchymal hamartoma presenting as a sacral skin tag in two neonates with spinal dysraphism. J Cutan Pathol. 2015;42(10):774-778.
- 8. Solis-Coria A, Vargas-Gonzalez R, Sotelo-Avila C. Rhabdomyomatous mesenchymal hamartoma presenting as a skin tag in the sternoclavicular area. Pathol Oncol Res. 2007;13: 375-378.