

# Chondroid Syringoma on the Tip of the Nose: A Case Report

Sajal Halder, MD; Arushi Ghosh, MBBS; Mona Sharma, MD; and Priyanka Hemrajani, MD

### ABSTRACT

Chondroid syringoma is a benign, rare, asymptomatic, slow-growing mixed tumor. The authors present the case of a 17-year-old adolescent boy who had a tumor on the tip of his nose for a duration of 8 months. An excisional biopsy was performed under local anesthesia. Based on histopathologic analysis, the resected lesion was identified as a chondroid syringoma.

**KEYWORDS:** benign, biopsy, chondroid syringoma, eccrine, excision, tumor

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### INTRODUCTION

Chondroid syringoma (CS) is a benign mixed tumor composed of eccrine gland elements in a collagenous stroma, which is distinctly myxoid and contains chondroitin sulfate.<sup>1</sup> It is generally located in the head and neck region and is usually chronic and asymptomatic. Typically, CS presents in middle adulthood as a solitary 1- to 3-cm nodule and occurs more frequently among men;<sup>2</sup> lesions in children are rare.<sup>3</sup> Diagnosis is based on histopathology, and the treatment of choice is complete excision.

Herein, the authors present the case of a 17-year-old boy with CS on the tip of his nose causing significant cosmetic impairment. The patient's guardian provided informed written consent for these case details and images to be published.

### CASE SYNOPSIS

A 17-year-old boy with a medical history of atopy presented with an abnormally located mass on the tip of his nose that had been present for 8 months. It was initially pea sized and enlarged over time; the patient noted it turned bluish after washing his face. On examination, the lesion was a skin-colored, pointed mass measuring approximately 1 × 1 cm that was firm to hard in consistency with telangiectasia and a bluish hue on the lower side (Figure 1).

A biopsy was performed, which noted the following gross features: gray-tan soft tissue mass measuring 1.2 × 1.0 × 0.2 cm. In terms of microscopic features, the biopsy reported well-circumscribed triphasic lesion in the dermis composed of epithelial components forming the inner layer of cysts and tubules; myoepithelial components forming the outer layer of tubules; as well as cords, clusters, and trabeculae within the stroma and stromal components showing chondromyxoid connective tissue. Individual cells showed benign morphology with no pleomorphism. Stroma also showed areas of hemorrhage. No mitotic activity, necrosis, or metaplasia was noted. The lesion abutted the resection margin at one end. The overlying epidermis appeared normal. No evidence of granuloma or atypia or malignancy was noted in the sections studied (Figure 2).

**Table. CUTANEOUS LESIONS OF THE NOSE**

	Benign/ Malignant	Clinical Features	Pathology	Treatment
<b>Nonmalignant tumors</b>				
Comedone	Benign	Multiple noninflammatory papules either open or closed, especially on the face	Dilated sebaceous ducts consisting of hyperproliferating ductal keratinocytes and sebum	Desquamation therapy with topical salicylic or retinoic acid, manual extraction by a cosmetician, and physical removal by electrocautery or CO <sub>2</sub> laser therapy
Fibrous papule	Benign	A firm, 1- to 5-mm papule at the ala, alar groove, and the tip of the nose	Histologically, it can be a clear cell fibrous, hypercellular fibrous, inflammatory fibrous, pigmented fibrous, or pleiomorphic fibrous papule, or an epithelioid variant	Cryotherapy, electrosurgery, laser therapy, or excision
Adenoma sebaceum	Benign	Multiple wart-like, waxy lumps mainly over the center of the face	Irregular dermal proliferation of fibrous tissue and blood vessels with follicular hyperkeratosis, pigmentary incontinence, and dermal melanophages	Physical methods of destruction or excision
Hydrocystoma	Benign	Solitary translucent bluish nodules. The blue color is due to the Tyndall effect, caused by scattered light	Unilocular or multilocular cystic spaces within the dermis	Trichloroacetic acid, simple excision, electrosurgery, CO <sub>2</sub> laser or a 1,450-nm diode laser can be used
Sebaceous hyperplasia	Benign	Whitish-yellow or skin-colored papule that varies in size (2-6 mm) often accompanied by seborrhea oleosa and telangiectasias with a central umbilication	Sebaceous gland hyperplasia	Photodynamic therapy, topical trichloroacetic acid, laser treatment (pulsed-dye or CO <sub>2</sub> laser), electrosurgery, shave excision, excision, or oral isotretinoin therapy for widespread or disfiguring hyperplasias
Melanocytic papillomatous nevi	Benign	They protrude from the skin surface and may be pigmented or skin-colored	Nevus cell nests in the dermis	Excision, shave excision or CO <sub>2</sub> and erbium: YAG or ruby lasers
Rhinophyma	Benign	Large exophytic, pink, lobulated mass over the nose with superficial vascular dilation. The lesion often spreads to the cheeks; however, it can also be limited to the nose	Sebaceous hyperplasia, follicular plugging, fibrosis	Derabrasion, excisional surgery by cold steel, cryosurgery, electrocautery decortication, and/or CO <sub>2</sub> laser ablation
Freckles	Benign	Multiple small brown macules that are very common, mostly on the face and nose of fair-skinned and red- or blond-haired individuals	Histologic examination reveals no increase in the concentration of melanocytes	Therapy consists of sun protection, IPL, or Q-switched alexandrite laser
<b>Vascular tumors</b>				
Hemangioma		Erythematous macule or telangiectasia to begin with; can progress to a focal tumor or diffuse plaque	Proliferating phase-endothelial cell hyperplasia, lobule formation, mast cells, prominent basement membrane. Involuting phase-fibrofatty tissue	Topical, systemic, or intralesional steroid, α2a and 2b interferon injections; cytotoxic medications; angiogenesis inhibitors; embolization; cryosurgery; or laser therapy. Imiquimod and systemic propranolol are also possibilities
Telangiectasias		Dilated blood vessels with a linear appearance measuring 0.5–1 mm in diameter	Vascular dilation of either capillaries or venules	Needle diathermy occlusion and polidocanol sclerotherapy. Also, PDL, long pulsed KTP-Nd YAG laser (potassium-titanyl-phosphate), and IPL treatment are used
Spider nevus		Spider-like growth pattern with a pin head-sized central arterial vascular nodule and small vascular radiations in a starburst-like pattern	Central ascending, spiral, thick-walled arteriole that ends in a thin-walled ampulla beneath the epidermis from which thin-walled branching channels radiate peripherally in papillary dermis	Therapy consists of laser therapy with pulsed dye or alternatively with KTP-Nd: YAG laser or an IPL system

(continues)



**Table. CUTANEOUS LESIONS OF THE NOSE, CONTINUED**

	Benign/ Malignant	Clinical Features	Pathology	Treatment
Osler-Weber-Rendu disease		Multiple punctate telangiectasias and hemangiomas		A long-pulsed Nd: YAG laser, flash-pumped dye laser or an IPL system. Also, estrogen therapy, electrocautery, and argon beam ablation have been used
<b>Inflammatory conditions</b>				
Rosacea	Benign	Clinically, rosacea is classified in four different stages. Stage I, rosacea erythematosa telangiectasia (prerosacea), shows facial flushing and telangiectasia. Stage II, rosacea papulopustulosa (vascular rosacea), is characterized by persistent facial erythema, telangiectasia, thickened skin, papules, and pustules. Stage III, glandular-hypertrophic or inflammatory rosacea, shows erythematous papules and pustules, telangiectasias, edema, connective tissue, and sebaceous gland hyperplasia. Stage IV, or rhinophyma, shows dermal and sebaceous gland hyperplasia and dilated and cystic sebaceous glands	Dilated blood and lymphatic vessels in upper and mid dermis with superficial perivascular and perifollicular mononuclear lymphohistiocytic infiltrate with edema and thickened elastic fibers. In granulomatous rosacea, noncaseating epithelioid cell granuloma can be seen	Topical metronidazole, azelaic acid. Systemic doxycycline, minocycline, clarithromycin, or prednisolone and oral isotretinoin. Persistent erythema and telangiectasia might respond to PDL and IPL treatments
Facial eosinophilic granuloma		Round or oval brown-red macular and papular lesions with large follicular pores (giving the lesion an orange peel-like appearance)	Eosinophilia and patterns of leukocytoclastic vasculitis are characteristic	Dapsone, intralesional steroid injections, topical tacrolimus. In cases of resistance to conservative therapy, the surgical excision of solitary lesions, cryotherapy, dermabrasion, or ablative laser therapy (CO <sub>2</sub> , argon, or erbium: YAG laser) should be considered
Sarcoidosis		Dark red, purple, or violaceous plaques and nodules can be seen	Noncaseating granulomas that consist of mononuclear phagocytes, epithelioid macrophages, and multinucleate giant cells	Topical and intralesional steroids, IL-2 inhibitors, anti-TNF- $\alpha$ . Also, pulsed dye or CO <sub>2</sub> laser ablation can be used
<b>Pre-malignant tumors</b>				
Actinic keratosis		Crusty, scaly patches of skin. Size ranges from 2 to 10 mm, and colors such as pink, red, or the same degree of pigmentation as the surrounding skin are observed	Histologically, five types can be distinguished: hypertrophic, atrophic, bowenoid, acantholytic, and pigmented	Therapy consists of simple curettage, topical photodynamic therapy, topical imiquimod, topical 3% diclofenac gel or 5-fluorouracil cream, and surgical excision
Keratoacanthoma		The lesion consists of a firm, cone-shaped nodule (1–3 cm in diameter) with a central horn-filled crater	Histologically, it often resembles SCC	Surgical excision with an excision margin of 2–3 mm is recommended
<b>Malignant tumors</b>				
Melanoma		Can present as a flat pigmented macule or elevated, dome-shaped or rarely polypoidal or pedunculated lesions over the face and neck	Nuclear pleomorphism, enlargement and hyperchromatism, prominent nucleoli, and mitotic activity	Surgical excision
SCC		Indurated plaque-like, verrucous, tumid, or ulcerated lesion with inflamed edge	Well-differentiated lesions (large polygonal cells with vesicular nuclei, prominent nucleoli, and abundant cytoplasm) to poorly differentiated lesions (polymorphic cells)	Surgical excision in high-risk cases. Curettage, cautery, cryotherapy, 5-fluorouracil in low-risk SCC
Basal cell carcinoma		Small, translucent or pearly papule or nodule with an indurated edge and ulcerated center located on head and neck (rodent ulcer)	Compact, darkly staining nuclei; poor staining of cytoplasm with indistinct cell margins; mitotic figures frequent	Excision, electrodisssection, and curettage for nonaggressive tumors; Mohs micrographic surgery for tumors over the canthus, periorbital area, or nasolabial folds, and for recurrent tumors

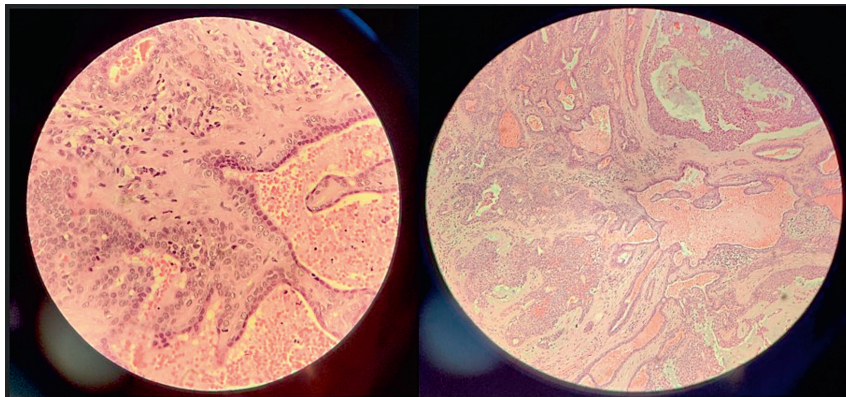
Abbreviations: IL-2, interleukin 2; IPL, intense pulsed light; PDL, pulsed dye laser; SCC, squamous cell carcinoma; TNF- $\alpha$ , tumor necrosis factor  $\alpha$ .

**Figure 1. CLINICAL IMAGES SHOWING THE CHONDROID SYRINGOMA ON THE TIP OF THE PATIENT'S NOSE**



**Figure 2. HISTOPATHOLOGIC EXAMINATION**

Examination showed a well-circumscribed triphasic lesion in the dermis composed of epithelial and myoepithelial components in the inner and outer layers, respectively.



All these features were suggestive of CS. Treatment was simple excision (diagnostic as well as therapeutic), which was then sent for histopathologic analysis.

## DISCUSSION

Chondroid syringoma is also known as a “mixed tumor.” Although traditionally regarded as a tumor showing eccrine derivation, a majority of lesions are folliculosebaceous-apocrine and only rarely are CS tumors truly eccrine<sup>1</sup> (Table). Biopsy reveals a well-circumscribed lesion in the dermis that may extend to the subcutis. The two elements of the tumor are mixed in roughly equal proportions: an epithelial element and a myxoid, chondroid, or fibrous stroma. The epithelial element consists of branching tubules and cords and islands of epithelial cells. The tubules may show decapitation secretion and eosinophilic granular material in the lumina. There may be clear cells in the tubules and cords. In some lesions, the tubules may be small, nonbranching, and lined by an eosinophilic cuticle. The stroma is usually distinctly myxoid and is composed of chondroitin sulfate. Fibrous, fibrocartilaginous, cartilaginous, and even osteoid changes may be seen in the stroma.

Chondroid syringoma is usually a benign condition, and simple excision is curative. Local recurrence is rarely seen. Malignant CSs have been reported, including rare cases with metastasis.<sup>4</sup> In such cases, wide excision with regular follow-up is advisable.

## CONCLUSIONS

This case is presented because of its rarity in this age group and localization. It highlights the importance of including CS in the differential diagnosis of all cutaneous or subcutaneous slow-growing solid nodules. Close follow-up of these tumors is recommended because of risk of malignancy. ●

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