

CASE 24

Patient: A 21-year-old Thai male from Ratchaburi

Chief Complaint: Solitary erythematous plaque on right clavicular area since birth

Present Illness: The patient presented with asymptomatic solitary erythematous plaque on right clavicular area since he was born. The lesion gradually increased in size. During the past two years, he noticed the growing hair from this lesion.

Past History: He was previously healthy and not taking any medication.

Family History: No family history of similar skin lesion.

Physical Examination: unremarkable

Dermatological Examination (Figure 24.1): Solitary erythematous atrophic plaque with a few terminal hairs on right clavicular area.



Figure 24.1

Histopathology (S09-18179) (Fig 24.2-3): Cystic lesion lined by pseudostratified columnar epithelium with some goblet cells

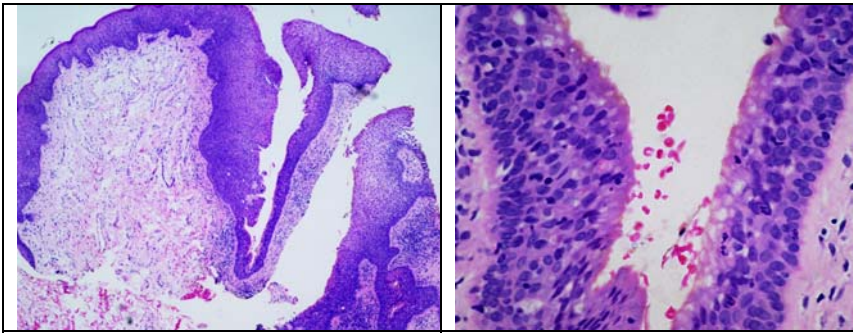


Figure 24.2, H&E 40x

Figure 24.3, H&E 400x

Diagnosis: Cutaneous bronchogenic cyst

Treatment: Plan to complete excision

Presenter: Wikanda Panmanee

Consultant: Suthinee Rutnin

Discussion:

Bronchogenic cysts are rare benign congenital developmental abnormalities of the embryonic foregut. The most common locations are intrathoracic and the posterior mediastinum. The skin is a rare site for bronchogenic cyst.

Cutaneous bronchogenic cyst is often a solitary lesion and typically found at birth. However, multiple and bilateral lesions localized on the neck and the scalp have been reported.¹ Males are four times more common than females.² It is noted as asymptomatic nodules with slowly increasing in size that eventually drain mucoid fluid. Rarely, It presents as a pedunculated growth.³ The most common location is the suprasternal notch², followed by presternal area, neck and

more rarely on the scapular area.⁴ Chin and abdominal wall have been described for unusual locations.^{5, 6}

Pathogenesis is related to embryological development alterations that cause distant migration of cells recruited from the bronchial tree.^{2, 5}

The characteristic histologic findings are pseudostratified ciliated columnar epithelium with presence of goblet cells. The cyst wall often contains smooth muscle and mucous glands, rarely cartilage.²

Malignant transformation is very rare. There are only few case reports. These include mucoepidermoid carcinoma for bronchogenic cysts⁷ and malignant melanoma for cutaneous bronchogenic cysts.⁸

The treatment is complete excision. Not only for diagnosis, but also for prevention of infection. Careful follow up is indicated because the cyst may be recur even after excision.¹ To avoid partial excision of a lesion, some reports recommend to perform a chest radiograph, CT, or MRI and, when appropriate, fistulography before the surgical procedure.²

References

1. Khaled A, Sfia M, Fazaa B, Zermani R, Ben Jilani S, Kamoun MR. Multiple cutaneous bronchogenic cysts located on the neck and the scalp. A case report. *Acta Dermatovenerol Alp Panonica Adriat* 2008;17:69-71.
2. Zvulunov A, Amichai B, Grunwald MH, Avinoach I, Halevy S. Cutaneous bronchogenic cyst: delineation of a poorly recognized lesion. *Pediatr Dermatol* 1998;15:277-81.
3. Miller OF, 3rd, Tyler W. Cutaneous bronchogenic cyst with papilloma and sinus presentation. *J Am Acad Dermatol* 1984;11:367-71.
4. Ozel SK, Kazez A, Koseogullari AA, Akpolat N. Scapular bronchogenic cysts in children: case report and review of the literature. *Pediatr Surg Int* 2005;21:843-5.
5. Calb IL, Haas E, Lewandowski MG, Maler L. Cutaneous bronchogenic cyst: an unusual localization and review of the literature. *Br J Dermatol* 2000;143:1353-5.

6. Kim NR, Kim HH, Suh YL. Cutaneous bronchogenic cyst of the abdominal wall. *Pathol Int* 2001;51:970-3.
7. Tanaka M, Shimokawa R, Matsubara O, et al. Mucoepidermoid carcinoma of the thymic region. *Acta Pathol Jpn* 1982;32:703-12.
8. Tanita M, Kikuchi-Numagami K, Ogoshi K, et al. Malignant melanoma arising from cutaneous bronchogenic cyst of the scapular area. *J Am Acad Dermatol* 2002;46:S19-21.