Multiple cutaneous bronchogenic cysts located on the neck and the scalp. A case report


Introduction

Bronchogenic cysts are rare benign congenital developmental abnormalities of the embryonic foregut, which may be found in children or adults. The most common locations are intrathoracic and the posterior mediastinum. The skin is a rare site for bronchogenic cyst, and in this location it is often a solitary lesion. The majority of cervical bronchogenic cysts are diagnosed in the pediatric population; these lesions are rare in adults. We report a new case of multiple cutaneous bronchogenic cysts (CBCs) located on the neck and scalp in an adult female patient.

Case report

A 21-year-old woman with a past medical history of recurrent otitis since early childhood and an imperforate left lacrimal duct presented with congenital multiple, painless red lesions bilaterally distributed on the lateral sides of the neck from which she sometimes noted spontaneous exudation of cloudy fluid. Clinical examination showed multiple red papules 0.7 to 1 cm in diameter, bilaterally and linearly disposed on the lateral sides of the neck (Fig. 1) associated with a draining orifice behind the right ear (Fig. 2). There was also a painless, flaccid mass 4 cm in diameter, with a cystic consistency, situated on the scalp (Fig. 3). This mass had been excised one year previously but recurred rapidly, only one week later.

Histological examination of a skin biopsy, of both neck and scalp lesions, showed a cystic cavity open at the level of epidermis, lined by ciliated pseudo-stratified columnar epithelial cells interspersed with goblet cells. This aspect of respiratory epithelium led to the diagnosis of a cutaneous bronchogenic cyst. In consi-
deration of the recurrent otitis and imperforate lacri-
monosal duct, other facial, auricular, and thoracic defor-
mities were eliminated by skull radiography, facial CT
scan, MRI of the brain, thoracic radiography, and ab-
dominal and thoracic ultrasound imaging. Treatment was
confined to a surgical excision of the scalp mass and
neck lesions.

Discussion

Cutaneous bronchogenic cyst (CBC) is a rare and usu-
ally solitary lesion that is four times more common in males
than in females (1). It is noted shortly after birth or in early
childhood as asymptomatic nodules slowly increasing in
size that eventually drain mucoid fluid, as noted in our
patient. The most common location is the suprasternal
notch (1), followed by the presternal area, the neck, and
more rarely the scapular area (2, 3). Unusual localizations
(chin (4) ab-
dominal wall
(5)) have been
described but, to
our knowledge,
multiple and bi-
lateral lesions lo-
calized on the
neck and the
scalp, as seen in
our patient,
have not been
reported previously.

Generally, CBC is poorly recognized by clinicians
because of the lack of pathognomonic clinical symp-
toms. In such cases histological findings are crucial to
distinguish this lesion from branchial cyst, thyroglossal
duct cyst, cutaneous ciliated cyst, dermoid cyst, in-
fundibular cyst, and trichilemmal cyst (1, 2).

The characteristic histologic findings are a ciliated
pseudo-stratified epithelial respiratory-type lining with
the presence of goblet cells. Smooth muscles and car-
tilage may also be present (1, 2, 4).

Pathogenesis appears to be related to embryologi-
cal development alterations that cause distant migration
of cells recruited from the bronchial tree (1, 4, 6).

Complete excision and histological examination are
indicated in most instances to confirm the diagnosis, to
relieve symptoms, and to prevent infection, along with
careful follow-up because the cyst may recur even after
resection, as noted for the scalp lesion in our patient.

There are only few reports of cases in which malig-
nancy has arisen from a congenital bronchogenic cyst
in adults. These include mucoepidermoid carcinoma,
adenocarcinoma (7, 8, 9), and even one case of mela-
noma (10), emphasizing the importance of its total sur-
gical excision.
REFERENCES


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