Clinical Image

Descending Necrotizing Mediastinitis Secondary to Spontaneous Sternocleidomastoid Muscle Abscess

Mediastinitis necrosante descendente secundaria a un absceso espontáneo del músculo esternocleidomastoideo

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A 21-year-old man, consulting due to fever (39°C) and cervical pain, presented a painful mass in the right laterocervical region extending from the mastoid apophysis to the medial end of the clavicle. He had no signs of pharyngotonsillitis or otitis. Of note on laboratory tests were leukocytosis (29,000 leukocytes/mm³) and neutrophilia (80%). Computed tomography showed a collection affecting the right sternocleidomastoid muscle (Fig. 1A) that extended downwards towards the anterosuperior (Fig. 1B) and

Figure 1. (A) Axial computed tomography (CT) image of the neck showing a collection in the right sternocleidomastoid muscle. (B) Axial CT image of upper chest showing a collection in the anterior mediastinum (asterisk), and another multiseptated collection in the posterior mediastinum (arrows). (C) Coronal reconstruction of chest CT with a better view of the posterior mediastinum collection extending downwards from the head. (D) Sagittal reconstruction of chest CT showing “pigtail” drainage tube (arrow) placed in the posterior mediastinal collection.

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posterior mediastinum (Fig. 1C). The sternocleidomastoid muscle and anterosuperior mediastinal abscesses were drained surgically after radiologically guided percutaneous drainage of the posterior mediastinal collection (Fig. 1D). Microbiological analysis confirmed *Streptococcus pyogenes* infection, and the patient’s progress was excellent.

Descending necrotizing mediastinitis is a rare, severe entity, usually caused by odontogenic or pharyngeal infections, although other sources of infection have been described, such as otomastoiditis, mumps, and epiglottitis. Descending necrotizing mediastinitis requires urgent, aggressive surgical treatment of the mediastinal collections and of the primary source of the infection. We have not found any previous cases in the literature of descending necrotizing mediastinitis caused by a spontaneous abscess of the sternocleidomastoid muscle.

**Reference**