

Is it an acute Mastoiditis with Torticollis?

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Abstract

Retropharyngeal abscess is uncommonly after acute pharyngitis. We reported a case of a deep neck abscess with torticollis in a young woman, misdiagnosed. Retropharyngeal abscess with mediastinal extension is a rare life-threatening complication with a mortality rate as high as 40%.

When a patient shows a torticollis with fever we must suspect a deep neck infection could be present and it is necessary to perform a TC or MRI of the neck. A retropharyngeal abscess rarely occurs but must be suspected otherwise the abscess can advance toward the mediastine and cause a mediastinitis that could be very dangerous for patient's healthy.

Keywords: Retropharyngeal abscess, neck, acute pharyngitis, retropharyngeal space

1.Introduction

Retropharyngeal abscesses have been recognized for centuries, the greek physician Galen was reported to have described a case [1]. Retropharyngeal abscess commonly develops when, after acute pharyngitis, the retropharyngeal lymph nodes (Gillette's or Henle's lymph node) within the retropharyngeal space become inflamed. This commonly occurs in childhood [2 - 3] because the retropharyngeal space is fairly open during childhood and becomes involuted with the age, shrinking back after the age of 3. The retropharyngeal space is divided by the prevertebral fascia into two parts, the anterior area is called retropharyngeal space, while the posterior area is called the "danger space". Behind the danger space, on the other side of prevertebral fascia, is the prevertebral space [4]. Because of this structure, infection of the retropharyngeal lymph nodes does not reach the prevertebral space directly. There are several intervening fascias ; so that inflammation of the prevertebral muscles is believed to occur very rarely when the abscess remains confined to the retropharyngeal space. It appears when the abscess spreads to the danger space or prevertebral space. Torticollis is a contracture of the neck that causes the head to be drawn to one side and usually rotated, so that

the chin points to the opposite side. Torticollis, or wryneck, is a common clinical sign found in a wide variety of childhood illnesses. Nearly 80 entities have been associated with torticollis, and include congenital, traumatic, inflammatory, neurologic, ocular, vestibular, and psychogenic causes [5]. Acute non- traumatic torticollis in children is most likely to be associated with an inflammatory process of head and neck. [3].

The cause of torticollis appeared to be the spreading of inflammation to the scalene group and musculus longus colli, to minimize the irritation and pain the patient assumes a twisted neck posture. The otalgia in our report was referred to retropharyngeal inflammation and not to a pathology of the middle ear because otitis media with effusion in a chronic transudate in the middle ear and it is not responsible of auricular pain. Also TC scan showed an opacization of mastoid due to the presence of a chronic transudate in the mastoid and in the tympanic cassa.

2. Case Report

In April 2011 a previously healthy 8-year-old child came to our Emergency Room, with the head tilted sideways toward the left side, omolateral otalgia and pain in the region of left sternocleidomastoid muscle. She had

fever (38.5 °C). Otoscopy showed an otitis media with effusion on the left side. ATC scan of head was required and showed opacization of left mastoid. The patient was discharged with diagnosis of acute mastoiditis and was prescribed a medical therapy based on antimicrobial drugs.

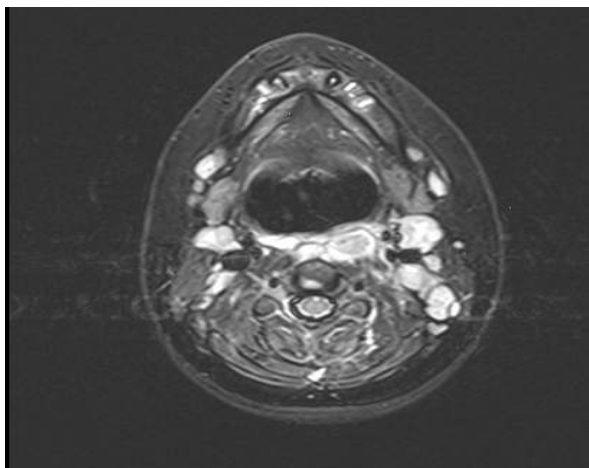


Figure 1. MRI - T1 weight axial scan: the abscess involved the left side of the retropharyngeal space.

The symptomatology did not stop and the patients after a few days returned to our Emergency Room for closer investigations. Temperature was high (39°C). White blood cell (WBC) count was 23,900/microl; C-reactive protein (CRP) was high and so creatine kinase (CPK). Magnetic resonance imaging (MRI) of the neck was prescribed and found a mass suggesting a retropharyngeal abscess. A conspicuous tumefaction of the prevertebral muscles due to inflammation was also noted (Figure 1). The patient was transferred to Otorhinolaryngologic Department. The endoscopical examination revealed a clear tumor on the posterior wall of ipharynx only on the left side.

We operated on the patient transorally. The posterior wall of the ipharynx on the left side was punctured and drained. Culture of the purulent fluid was negative for aerobi, anaerobi and b. of Koch. After the operation, the patient was given intravenous antibiotics; her fever as well as inflammatory response on the blood test then improved

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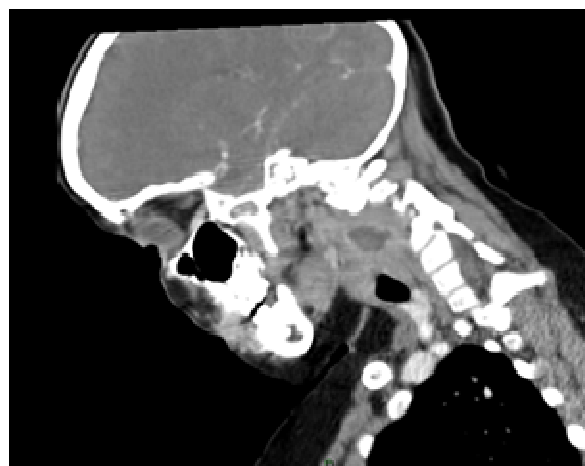


Figure 2. CT scan: the abscess in r the retropharyngeal space with compression of larynx and vertebral muscles.

remarkably. We prescribed a postoperative RMN that showed the disappearance of retropharyngeal abscess (Figure 2).

3. Discussion

In this case immediate surgical intervention was necessary because the inflammation seemed to have reached the prevertebral space. Therefore, if we did not perform incisional drainage, mediastinitis would have occurred.

Retropharyngeal abscess with mediastinal extension is a rare life-threatening complication with a mortality rate as high as 40% because it is capable of causing sudden respiratory obstruction [6].

4. Conclusions

In conclusion we can say that when a patient shows a torticollis with fever we must suspect that an infection of head and neck could be present and it is necessary to perform a TC or MRI of the neck. A retropharyngeal abscess rarely occurs but must be suspected otherwise the abscess can advance toward the mediastine and cause a mediastinitis that could be very dangerous for patient's healthy.

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