ABSTRACT

Bezold’s abscess is a deep cervical abscess arising from an acute case of mastoiditis. With the advent of antibiotics, this disease has become extremely uncommon in our region. This paper has the objective of reporting a case of Bezold’s abscess in a patient seen at the otorhinolaryngology emergency service of Universidade Federal de São Paulo, and to carry out a review of literature on the topic.

Keywords: Abscess/etiology; Abscess/diagnosis; Mastoiditis/complications; Neck/pathology; Tomography, X-ray computed; Case reports

INTRODUCTION

Bezold’s abscess is a deep cervical abscess arising from acute mastoiditis. It was first described in 1881, by a study in cadavers in which purulent secretion was observed draining from the medial surface of the mastoid process through the digastric groove. In the neck, this suppurative process extends between the digastric and sternocleidomastoid muscles. Bezold’s abscess is different from the other more common forms of abscesses, such as the subperiosteal that appears from erosion of the external surface of the mastoid cortex.

With the advent of antibiotics, Bezold’s abscess has become an extremely rare disorder.

Common signs and symptoms are fever, otalgia, and increased volume of the cervical region, otorrhea, restricted cervical mobility, facial paralysis, and hypoacusia. Computed tomography (CT) is a useful test in this disease, since it allows the identification of pus collections in the cervical region and mastoid involvement. Treatment is surgical, accompanied by wide spectrum antibiotics.

This paper describes a case of Bezold’s abscess, a rare complication of suppurative otitis media, seen at the otorhinolaryngology emergency center of Hospital São Paulo of Escola Paulista de Medicina and presents a brief review of literature.

CASE REPORT

A male 29-year-old patient, bricklayer by profession, born and coming from São Paulo, presented with progressive increase in volume of the right retroauricular and cervical region for 30 days, which was painful, accompanied by moderate otalgia and malaise. The patient denied hypoacusia or otorrhea.

Upon physical examination, the patient was afebrile, with levels I, II, and V retroauricular and cervical swelling on the right, hyperemia, and fluctuation. Otoscopy revealed an intact, thickened, and slightly hyperemic tympanic membrane, with no secretion (Figure 1).

A CT was performed on the temporal and neck bones, which showed contents of soft tissue parts in the middle ear and mastoid process on the right and an extensive collection in the cervical region (Figure 2). The patient was submitted to surgical drainage with local anesthesia. A transverse cervicotomoy was...
complications include subperiosteal abscess, labyrinthitis, facial paralysis, and perichondritis; on the other side the intracranial ones include meningitis, encephalitis, cerebral and peridural abscess\(^{(1)}\).

Discovery of antibiotics radically changed the course of mastoiditis cases and drastically reduced its complications over the last 50 years\(^{(2)}\).

The primary reason for patients with otitis media to continue experiencing serious complications is the delay in diagnosis on the part of physicians, inadequate antibiotic therapy, increased bacterial resistance, and concomitant presence of cholesteatoma\(^{(1)}\).

Bezold’s abscess is an extremely rare complication of otitis media and mastoiditis and is frequently diagnosed at a late phase, generally because it was not considered as a differential diagnosis\(^{(3)}\).

The most common signs and symptoms in the clinical presentation of this disorder are fever, otalgia, increased volume in the cervical region, otorrhea, restricted cervical mobility, facial paralysis, and hypoacusia\(^{(2,4)}\). Cases have been reported in literature of an association between Bezold’s abscess and thrombosis of the lateral sinus and post-streptococcal glomerulonephritis\(^{(3,5)}\).

Mastoid pneumatization is considered an important predisposing factor in the genesis of Bezold’s abscess, since it leads to a thinning of the mastoid walls. In the absence of pneumatization, the mastoid’s bony walls are thick and hinder the erosion process. For this reason, this type of abscess is rarely found in children, since pneumatization of the mastoid process is still not complete\(^{(2)}\). Antecedents of cholesteatoma and mastoidectomy are also considered predisposing factors for the development of Bezold’s abscess\(^{(3)}\).

In the case of presence or suspicion of Bezold’s abscess, wide spectrum antibiotics should be initiated performed on the right side with approximately 4 cm; the secretion collection was explored with drainage of 12 mL of purulent secretion that was sent to the laboratory for bacterial culture and antibiogram. Later, a Penrose-type laminar drain was positioned and an occlusive bandage covered the wound (Figure 3).

After the procedure, intravenous treatment with antibiotics (ceftriaxone and clindamycin) and corticotherapy was initiated. Drainage was reassessed daily with expression of the cervical region to remove purulent secretion.

The patient remained hospitalized for five days and showed adequate clinical progression; he was discharged from the hospital with maintenance of oral antibiotics.

**DISCUSSION**

Otitis media complications are classified into two main categories: intra and extracranial. Extracranial
and a CT should be ordered to evaluate the size of the abscess\(^{(2,3)}\).

According to literature, early surgical treatment generally is necessary to establish drainage of the mastoid cells and the cervical region\(^{(1,2)}\).

REFERENCES