



Penetrating foreign body of parotid gland and external auditory canal: a case report

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Abstract:

A foreign body in the parotid gland whether from the oral cavity or through the skin is extremely uncommon. We described a case of a young man who got accidentally injured by a metallic stick piercing the skin of the external auditory canal through the parotid gland. Emergency surgical removal was performed, the diagnosis of the foreign body was quite easy. In contrast, determination of the location in the gland had to be evaluated. Although these materials are assumed to be harmless to human tissues, the complete and immediate removal is to prevent salivary fistula resulting from inflammation.

Case report:

This is the case of a man who presented to the emergency department with a metallic foreign body lodged in the parotid through the skin into the right tragus introduced accidentally. CT images were analyzed showing the course of the foreign body across the superior lobe of the parotid gland, and the patient underwent successful removal of the intraparotid foreign body without parotidectomy and facial nerve dissection.



Figure1: metallic foreign body lodged in the parotid through the skin into the right tragus.



Figure2: CT images were analyzed showing the course of the foreign body across the superior lobe of the parotid gland

Discussion:

The parotid foreign body is an extremely rare entity [1], it can be secondary to trauma penetrating the region and reaching the gland through the skin, or as a result of retrograde migration of an ingested object through the Stenon duct. [2,3]

The nature of the foreign body is variable: wood, plastic, metal, or lead [1,4] which makes it difficult sometimes to put it into evidence by standard radiography in the event that it is a transparent radio object.

The diagnosis is often suspected in the immediate post trauma by the patient or his entourage thus allowing an orientation to the clinician who will start the investigations in order to make the positive and topographic diagnosis. [1,5,6]

CT scan remains the examination of choice, allowing both positive and topographic diagnosis of the foreign body, while MRI is often reserved in current practice for complicated or late cases due to its high cost and limited accessibility. [7,8]

This is a diagnostic and therapeutic emergency because everything delayed ablation of the foreign body or ignorance of its presence exposes to infectious and inflammatory complications which can thus give tables of: salivary cyst and fistula, abscess collections, pseudo tumors.

The extraction of foreign body is not always easy given the reports anatomical aspects of the region, in particular with the facial nerve. The technique can range from a simple ablation through the entry port up to exofacial parotidectomy with monitoring and identification of the facial nerve. In our case the foreign body was clear, and its nature made it possible to know his topographie by a simple standard X-ray, CT helped better appreciate its exact location and relationships. Thus, we proceeded to its extraction via the orifice of the entrance. Its immediate management made it possible to avoid any local complications.

Conclusion:

Although rare, parotid foreign bodies should not be unknown, this is a diagnostic and therapeutic emergency because not taken care of in time exposes to formidable complications and excessive actions that could be avoided by a simple police interrogation and adapted imagery.

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