

Selection of reconstructive technique is decided according to the defect size and location, presence or absence periosteum. Primary closure limited to wounds measuring less than 3 cm in diameter. Skin graft can be used over bone if the pericranium is intact or the outer cortex is removed to expose the diploic space. Proper design of local flaps includes incorporation of major vascular pedicles within broadly based flaps and closure without excessive tension.<sup>1</sup> Initially, our rotation scalp flap had excessive tension to close entire defect area. Because of this, we used rotation cheek flap to close anterior defect area. In selected patients, this approach can be useful for large defects that include scalp and cranium (Fig. 1).

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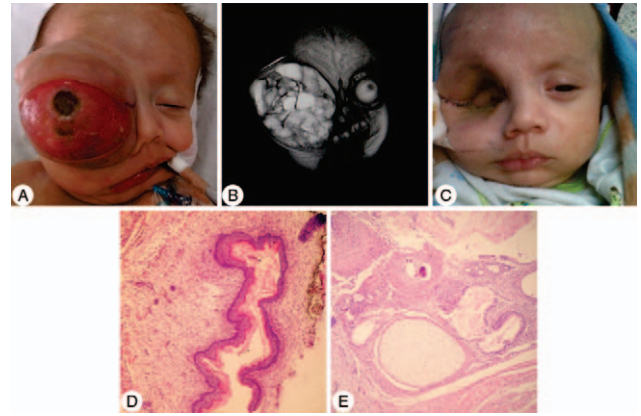
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## Immature Orbital Teratoma With Intracranial Extension

**To the Editor:** The vocable *teratoma* means “a monstrous tumor.” The word is derived from the Greek , formed with the prefix (teras or terat, meaning monster) and the suffix (oma, which means swelling or tumor). The term was coined in 1869 by Virchow to describe a sacrococcygeal growth<sup>1</sup> and since then it has been used to name clinically large-sized neoplasms with specific histopathologic characteristics.

We present the case of a 20-day-old boy brought to the Head and Neck Surgery Department at Instituto Nacional de Cancerología in Bogotá, Colombia, with the chief complaint of an enormous, protruding mass of the right eye (Fig. 1A). Magnetic resonance revealed an ocular globe replaced by a calcified, multilocular, mainly cystic mass causing total loss of the anatomic pattern and expansion of the osseous walls and complete displacement of the eyeball, without extension to neighboring structures (Fig. 1B). At 28-day old he underwent surgical excision of the tumor (Fig. 1C). The histopathologic analysis revealed an immature orbital teratoma (Fig. 1D and E).

In 2011, Polito et al<sup>2</sup> stated that approximately 70 patients have been reported. Orbital teratomas usually present in otherwise healthy children with unilateral congenital proptosis. Epidemiologically, our patient differs in some aspects. The literature shows a 2:1 female-to-male ratio and a slight preponderance for the left orbit.<sup>3</sup> We present a male patient with a right eye orbital teratoma. Gnanaraj et al<sup>4</sup> outlined the objectives for their management: to



**FIGURE 1.** (A) Clinical photographs of patient at presentation. (B) Preoperative magnetic resonance image in coronal and axial planes showing the extent of the neoplasm. The image demonstrates a calcified, multiloculated cystic mass extending to the medial cranial fossa. (C) Postoperative picture. (D) Histopathology showing different tissue components. (A) Skin: stratified squamous cell epithelium, and (E) mature cartilage and glandular-like structures lined by respiratory epithelium with ciliated cells. The pathological report was consistent with immature orbital teratoma, grade 2.

save the eye, allow for normal orbitofacial development, and to maintain cosmesis. Preservation of the globe is not possible when the eye is disorganized, when the nerve engulfs the optic nerve or when there is extreme proptosis with exposure keropathy, as in the patient that presented to our institution.

Regarding treatment options, it is clear that surgical resection of the mass has been the method of choice since 1863. In our patient, total removal of the tumor was not possible, as it was documented in both postoperatively imaging and histopathological reports. Therefore, concomitant radiotherapy was necessary. This situation puts our patient in a lifelong follow-up program and it includes regular clinical and radiographic evaluation of the growth and development of the face and orbital complex. The large ocular defect created by the surgical resection of the tumor calls for prosthetic rehabilitation.

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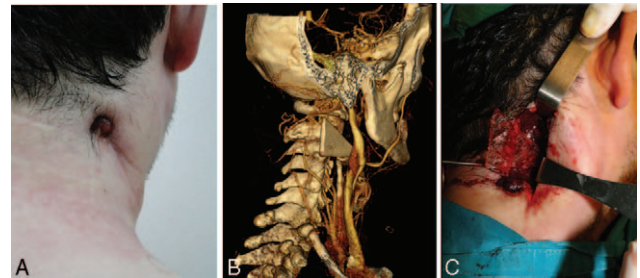
## Penetrating Neck Injury Remnant Mimicking Chronic Cutaneous Neck Fistula

**To the Editor:** Neck injuries breaking past the sternocleidomastoid muscle are described as penetrating neck injuries. They constitute approximately 10% of all emergency patients and are dangerous, potentially lethal conditions.<sup>1,2</sup> Depending on the patient's condition, the treatment ranges between prompt surgical intervention and nonoperative management.<sup>2,3</sup> In this unusual patient, we report a patient who, during an epileptic seizure, sustained a penetrating neck injury two and a half years ago in which a glass shard lodged in the carotid triangle without damaging any vital anatomic structures. We reviewed similar complicated injuries and highlighted some pearls and pitfalls regarding diagnosis and treatment.

A 42-year-old male patient is brought to our clinic with a sore on the right side of the neck, which has been oozing for 6 months. He is an epileptic patient on antiepileptic medication (oral levetiracetam 500 mg, twice a day). Physical examination reveals a 1-cm-wide festering lesion on the right posterior cervical region. Patient history reveals that 2 years prior to onset of his symptoms, he fell backward on a glass door during a seizure and sustained a 6 cm laceration on the back of his neck. He was rushed to the emergency department and once it had been decided that he had no critical deep injuries, visible glass shards were removed and the wound was closed primarily. No further investigation was undertaken. This history raised suspicions about remaining foreign body. Three-dimensional reconstruction of computed tomography angiography revealed a 35 × 45 mm triangular-shaped foreign body, deep to the right sternocleidomastoid muscle, extending from first to third intervertebral disc anteriorly. Its tip was close to carotid artery, internal jugular vein, and vagus nerve. The patient was taken into the operating room and under general anaesthesia; shard was accessed via posterior cervical incision which has been extended from the fistula. It was carefully removed taking utmost care to keep the surrounding critical structures out of the harm's way. After irrigation of the wound and excision of the fistula tract, a suction drain was placed into the wound before its primary closure (Fig. 1).

Penetrating neck injuries are associated with high mortality and morbidity. Immediate surgical exploration is not recommended if the patient is haemodynamically stable.<sup>2</sup> If and when a symptom that can be associated with major vessels, nerves, alimentary tract, and/or respiratory tract presents itself, surgical intervention is commenced accordingly.<sup>3</sup>

Preoperative imaging methods including plain radiography, ultrasonography, computed tomography, and computed tomography angiography need to be undertaken for not only detecting a



**FIGURE 1.** Management of the patient with the history of penetrating neck injury. (A) Festering sore on the right posterior cervical region. (B) Computed tomographic reconstruction of the right cervical region showing the glass shard lodged with its tip in close contact with the right internal carotid artery. (C) Triangular shard of rippled glass being extracted from the incision extended from the fistula.

foreign object but also understanding its relation to critical anatomical structures as well. In certain patients, magnetic resonance imaging can be useful.<sup>4</sup> In patient of a chronic fistula with a history of penetrating neck injury, remnant foreign body must be suspected.<sup>5</sup> Aside from potentially deleterious consequences of any factor that may dislodge the artefact and inflict damage to critical structures (ie, another seizure causing the patient to fall on the side of his neck), prolonged presence of any foreign body is prone to complications including but not limited to allergic reactions, granulomatous inflammation, tissue necrosis, and reactive lymph node proliferation.<sup>1</sup> Copious discharge and mechanic symptoms are indications for surgical intervention.<sup>5</sup> Routine antibiotic prophylaxis and tetanus immunization is necessary.<sup>6</sup>

As a conclusion, we aimed to share our clinical experience about this extremely rare but potentially catastrophic condition. When approaching the patient with a chronic neck fistula, a history of penetrative neck injury must be questioned and if present, remnant foreign body must be ruled out by all means necessary before deciding on any conservative or surgical management. The physician also must have a sound appreciation of the three-dimensional anatomy of the region to assess the safest strategy to access and remove the object. And last but not least, surgery must not be undertaken without contingency for inadvertent injury to critical structures during removal.

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