

News Letter

Treat Externalear Trauma

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NEWS LETTER

The auricle is the visible part of the outer ear, symmetrically located at the sides of the head, posterior to the temporomandibular joint and before the mastoid process. It has an oval shape and reaches a final size of about seven years and is susceptible to many individual differences in shape, size and method of implantation on the head. It has a vertical major axis slightly inclined at the bottom and at the front and with an average length of 60-65 mm and a minor axis about 30-35 mm long. It has a cartilaginous structure that gives it considerable elasticity and is covered by the skin. Together with the external auditory canal, it performs the function of collecting sound waves and conveying them gable. The role of the pavilion is to collect and amplify certain frequencies in the sounds (Figure 1). This role is sensitive in stereophony, and should be used for spatial recognition (locating a sound in the space around us). This trait is easy to understand by looking at the ears of a dog that can be oriented differently to accentuate its stereophony. In humans, our ability to independently orient our flags has been lost over time, even if it remains a vestigial function. There is also a change in sound related to a small part of the roof and for the most part to the external auditory canal. This modification favors the alert function but not the word [1-3].

The auricle is easily exposed to trauma, which, depending on the type and intensity of the injurious mechanism, can cause bruises, burns, wounds, without or with loss of substance, partial or total amputations. Traumatic events can be located at the ear and / or involve other finitime structures.

The etiology is varied: personal injury, traffic accidents, sports injuries, cuts, accidents at work, burns, falls. The traumas of the pavilion expose to various risks: the risk of aesthetic sequelae and the risk of infection. Pertinent History and Physical Findings with Direct examination of the external ear and tympanic membrane and evaluation of hearing with an audiogram [4-5].

The most common complication from blunt trauma to the ear is the formation of auricular hematoma. Failure to recognise and treat this condition early usually leads to an ugly deformity of the pinna known as a "cauliflower" ear. Collection of blood orserous fluid between the perichondrium and cartilage may be successfully treated by needle aspiration under sterile conditions followed by the application of a pressure dressing. If a hematoma recurs within 48 hours, formal incision and drainage are then required [5-8].

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The reconstruction of the pavilion has historically been treated through plastic surgery based on the insertion of reshaped costal cartilages or prostheses in synthetic materials inserted into subcutaneous pockets obtained by expansion of retroauricular tissues. Especially at the aesthetic damage, where there is no contemporary interest in the middle ear, the interest of the Legal Doctor is addressed. It is obvious that in judging the compensation of aesthetic damage we must take into account various factors: gender, age, socio-cultural condition, anterior state (Figure 2).

It is always appropriate to clarify when and how these unsightly outcomes appear, by providing even coarse parameters of their visibility: at first glance or only during a careful examination, visible only closely, in intimacy (50 cm), at a distance « social » (3 meters). Keep in mind that stabilization of a scar is acceptable after one year, while that of a child often has a longer evolution, from eighteen months to two years. Auricle was the most often injured part of the ear. Meticulous and timely surgical management with efforts to maintain contour of pinna and prevention of infection helped minimise disfigurement.



Figure 1 Outcomes of mutilation of the auricle from an animal bite into the slaughterhouse.



Figure 2 Vincent Van Gogh: The mutilation of auricle the most famous.

The traumas of the auricle, although fortunately rare, due to their importance on the aesthetics of the person and on hearing ability, are important. A medical, surgical and rehabilitative path is necessary. The medico-legal evaluation is often important according to the assessments of the law [9].

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