

She Got an Earful

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History

- ◇ 21 yo female collegiate soccer student athlete
- ◇ Injured during a match, playing with newly pierced ears
 - Pierced 4 weeks prior
 - Did not remove earrings during match play
 - Placed plastic bandage strips over her ears to "protect" them
- ◇ During play, she backed into another athlete
 - Opposing player's head made contact with her ear
 - The anterior aspect of her earring was pushed partially through her lobe with the stud becoming embedded in the earlobe
 - The point of the post lacerated the skin anterior to the mastoid bone
- ◇ Immediate pain and bleeding were managed by the athletic trainer on the field
 - Rapid bleeding control was essential for the athlete to be able to remain on the field
 - Skin glue was placed to obtain hemostasis
 - A plastic bandage strip was placed over this
 - The player was able to continue play
- ◇ After the match, the player was attended to by the athletic trainer
 - Attempts were made to remove the earring in the locker room
 - These were too painful to be successful, so a dressing was placed for travel
 - She was given acetaminophen for pain control and plans were made for follow up with team physicians upon return to town the next morning

Physical Exam

- ◇ General: Alert, Oriented x 3, No acute distress
- ◇ Eyes: PERRL, EOMI, No erythema or tearing
- ◇ Left Ear:
 - ⊗ Cartilage piercing and single small stud in earlobe without trauma. Healed previous piercing site in earlobe.
- ◇ Right Ear:
 - ⊗ Previous piercing site, now closed
 - ⊗ New piercing site with the anterior aspect of the earring embedded into the earlobe, covered in surgical glue and Steri-strip
- ◇ Head: Small hemostatic laceration behind ear; No other signs of bleeding or trauma
 - No concern for concussion
- ◇ Skin: No signs of infection

Images



Normal Left Ear
Two piercings
Healed prior piercing



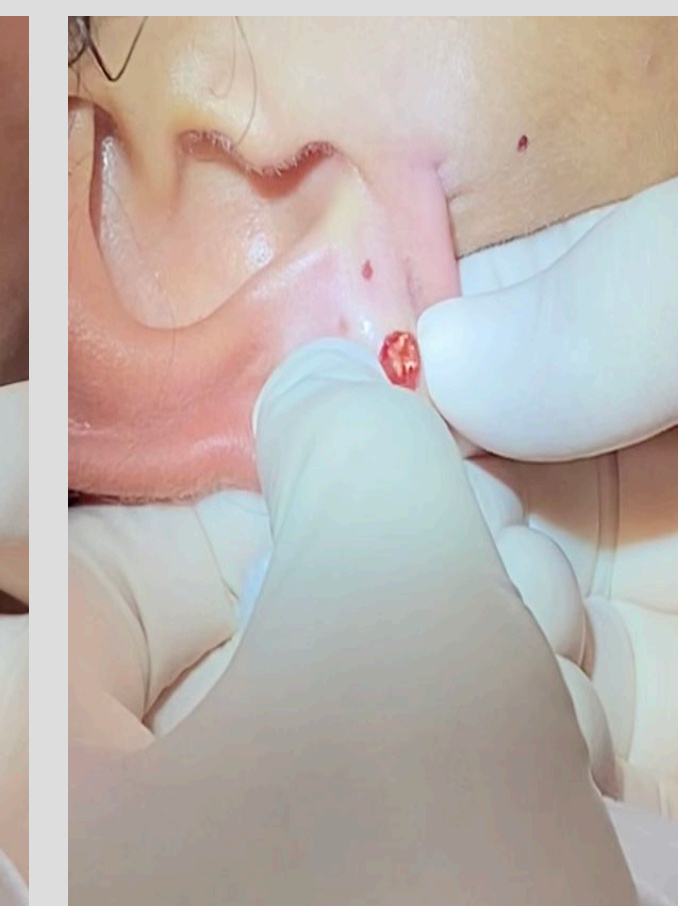
Posterior Right Ear
Laceration behind ear;
hemostatic with
skin glue



Injured Right Ear
Stud earring embedded
into earlobe (arrow)



Injured right ear after
inferior auricular nerve
block; locating stud

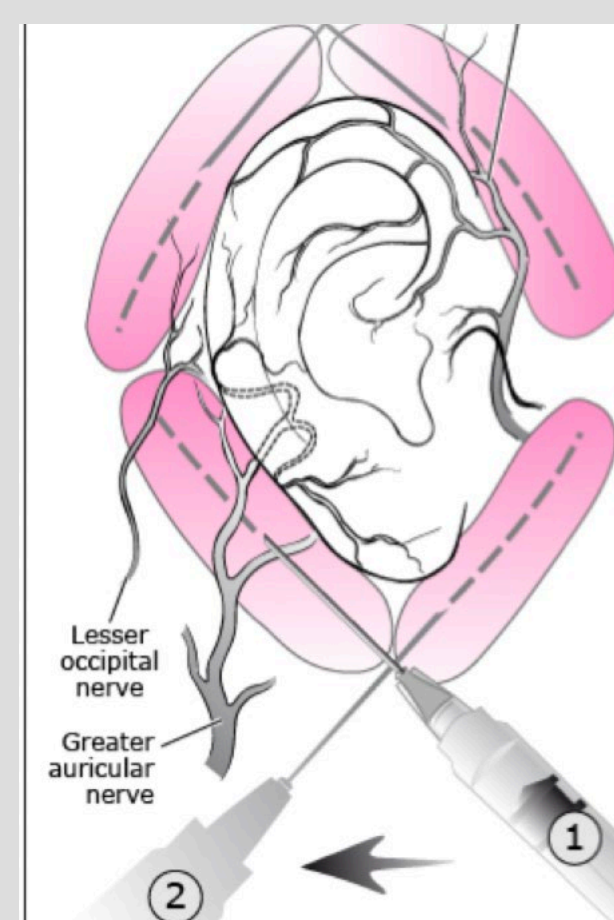


Earring dislodged from
earlobe and then
removed

Management and Procedure

- Informed consent obtained
- Skin glue removed with triple antibiotic ointment
- Area cleansed with chlorhexidine
- Initial attempts to dis-embed earring stud were too painful
- Inferior auricular nerve block was administered to provide widespread anesthesia; preferred over local infiltration with anesthetic which may blur skin planes
 - 1.5 cc of 1% Lidocaine **without** epinephrine used in ring block fashion
 - 25G 1 1/2" needle was inserted inferior to the lobe and directed posteriorly toward the mastoid bone and then redirected anteriorly with another 1.5 cc's injected
- Earring stud was noted to be displaced dorsally and proximally. The earring back was loosened and the earring was angled toward the skin opening. Traction was provided and the post was pressed anteriorly, allowing the earring to be popped out of the earlobe.
- Educated on wound care

Greater Auricular Nerve Ring Block



This figure demonstrates the procedure to provide adequate ring block anesthesia to the ear. As our patient's earring was in the lobe, we were able to adequately numb the area using sites one and two. If the piercing was in the helix, conch, tragus, or daith, then the patient would require the entire four sites placed for adequate local anesthesia. No epinephrine should be used in this injection due to concern for possible skin necrosis.

Final Diagnosis

Stud Earring Embedded into Earlobe after Trauma During a Soccer Match

Discussion

- ❖ Ear piercing is one of the most common cosmetic procedures performed.
 - ❖ Estimated 85% of women in the USA have their ears pierced
 - ❖ A 2017 study of 345 people regarding presence of earlobe piercings, 84% of the women and 64% of the men responded yes
- ❖ Ear piercing is common for several reasons to include aesthetics, self expression, trends/fads, culture/tradition, religion, peer pressure, or rebellion.
- ❖ Complications can occur to include split or cleft earlobes, bleeding, embedded jewelry, infections to include cellulitis and perichondritis, metal allergy dermatitis, keloids, or hypertrophic scarring.
- ❖ Embedded earrings: posterior aspect more common
 - ❖ Sliding back prong can help prevent this
 - ❖ Anteriorly, a wider base helps prevent
- ❖ Related to athletics, **PREVENTION** is the most important aspect.
 - ❖ Removal for practice, matches, and sleeping
 - ❖ The NCAA handbook specifically states:
 - ❖ A player shall not wear anything that is dangerous to themselves or any player (4.2.1)
 - ❖ A player shall not wear jewelry of any type whatsoever (4.3 and A.R. 4.3.a)
- ❖ Since piercings and tattoos typically take 8 weeks for skin healing and maturation, it is best to delay these procedures to avoid interfering with training or competition.
- ❖ It is important for the team athletic trainer and physician to be able to manage piercing related complications.
- ❖ When trauma does occur, an auricular block helps achieve adequate pain control without disruption of the underlying tissue for laceration repair or removal of embedded jewelry.
- ❖ Tdap booster should be provided for dirty injuries when >5 years has lapsed since the last immunization

Outcome and Return to Activity

- The patient was counseled to leave the earring out for 6-8 weeks to allow the area to heal.
- She was encouraged to remove the other earring to prevent this from occurring on the opposite side.
- She should choose a wider base in the future.
- She received a Tdap booster.
- She returned to training and matches with no further issues or signs of infection. The wound is healing well.

References

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