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Lacerations Soft-tissue injuries of the face are a result of blunt or sharp trauma and should be carefully examined to exclude any associated nerve, parotid duct or underlying bony injury (Figure 31.7). These can mostly be repaired under local anaesthesia (LA) and should be treated within 24 hours of injury to avoid poor healing and an unsightly scar. Lacerations in uncooperative children and large contaminated wounds in adults usually require repair under general anaesthesia (GA). Uncomplicated wounds with no tissue loss should be cleaned and closed in layers. If the skin is contaminated with dirt, it should be gently scrubbed with a soft brush to prevent dirt tattoo. Facial skin has a rich blood supply , which contributes to its excellent healing; therefore, wounds should only be debrided of frankly necrotic tissue. Intraoral wounds heal very well; if small, they can be left to heal by secondary intention, especially in children to avoid treatment under GA. Resorbable 3-0 or 4-0 sutures are placed intraorally and for the deep layers of the skin. The most superficial skin layer should be closed with a 5-0 non-resorbable monofilament suture, except in potentially uncooperative children when 5-0 or 6-0 resorbable sutures can be used. Some surgeons also use resorbable 5-0 or 6-0 skin sutures in adults. For some small superficial clean incised wounds, cyanoacrylate tissue glue can be utilised. This must be avoided in periocular skin because of the risk of spillage into the eye, which can lead to severe corneal damage. Lacerations involving the eyelid margins and those crossing the vermilion border of the lip need special attention to avoid poor approximation of the skin edges, which can r esult in a poor cosmetic outcome. If there is tissue loss, adjacent skin can be undermined and mobilised to achieve primary closure, but incisions for local flaps or skin grafts should be avoided in the initial management. V ery large areas of tissue loss may require free flap reconstruction if local tissue flaps are inadequate for resurfacing the defect. Facial nerve Facial nerve function should be routinely assessed in all facial lacerations. Any nerve injuries are best repaired primarily under high magnification and GA. In general, nerve injuries that lie lateral to the line drawn vertically down from lateral canthus of the eye are repairable, and this should be attempted. A nerve stimulator or monitor may be helpful in identifying the transected nerve ends. Parotid duct The middle third of a line drawn from the tragus of the ear to the midpoint between the upper lip and the alar base represents the surface landmarking of the parotid duct. A careful examination of the wound may reveal saliva leak in the case of a duct injury . Methylene blue solution can be injected through the parotid duct opening intraorally (adjacent to the

(b) Figure 31.7 (a, b) Extensive soft-tissue laceration, the full extent of which may only be revealed on careful examination. Corneal protec

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The repair is best achieved under high magnification, over a cannula inserted through the duct opening under GA. The buccal branch of the facial nerve that closely follows the duct may also get transected in the injury; this requires careful examination. Animal and human bites Facial bites should be cleaned thoroughly and closed primarily in layers. Because of the high risk of wound infection, anti biotics must be prescribed according to local microbiology guidelines. With human bites, consideration should be given to testing the patient for human immunodeficiency virus (HIV) infection, and hepatitis serology is also sensible, if the patient is deemed to be at high risk of being infected as a result of the bite. If there is significant tissue loss, a staged reconstruction may be required. Summary box 31.4 Soft-tissue injuries /uni25CF /uni25CF /uni25CF

Examination of the function of both motor and sensory nerves should be conducted prior to the administration of LA All animal and human bites must be covered with prophylactic antibiotics Tissue loss may require staged reconstruction

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Revision #1
Created 2025-12-31 15:13:17 UTC by Omar Ayman
Updated 2025-12-31 15:13:17 UTC by Omar Ayman