Disbudding and dehorning

- improve stock management
- prevent potential aggressive behavior towards other members of herd
- reduce traumatic damage to such persons and other individuals and stock,
- especially udder and skin injury resulting in eventual lowered hide value

Selection of technique

Dr. Ayad

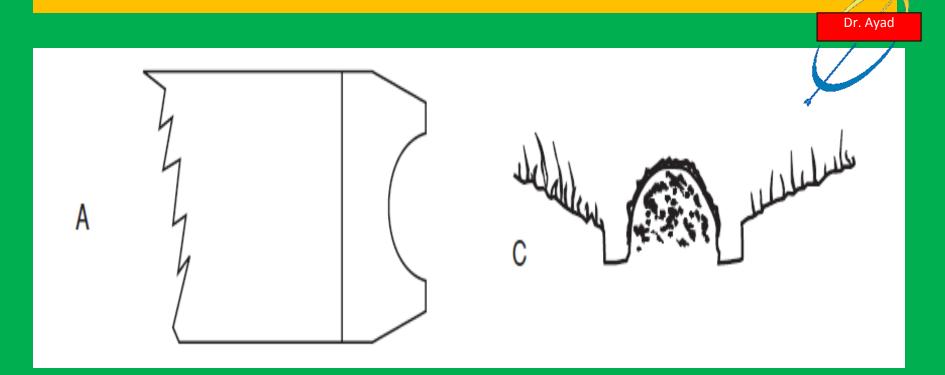
 Very young calves (< 1 week old) may be disbudded by application of a local caustic compound (NaOH, KOH, collodion). Wear protective gloves.

Clip hair from horn buttons. Protect surrounding skin with petrolatum, and apply thin film of paste Confine calves for 30 minutes.

Technique of disbudding

- place hot (electrical or gas-powered) disbudding iron on bud and rotate
- several times, angling the instrument so that the edge burns the skin
- around the periphery of the bud to include adequate germinal epithelium

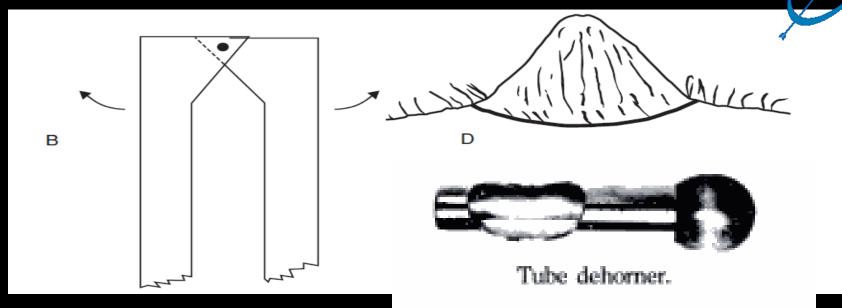
Disbudding



The ideal age for disbudding is one to two weeks old, when horn buds project 5–10 mm, are easily palpable, and a disbudding iron can be used alone (see Figure 2.1a,c). Haemorrhage is nil.

Disbudding and dehorning

Dr. Ayad

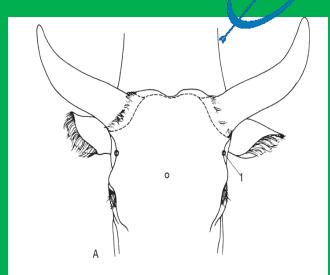


From about one to four months (horn length 3–5 cm) a Barnes dehorning gouge (see Figure 2.1b,d), Roberts dehorning trephine, or double action hoofshears may be applied, followed by a disbudding iron for haemostasis. Alternatively the Danish debudding gouge is available. The bud and peripheral

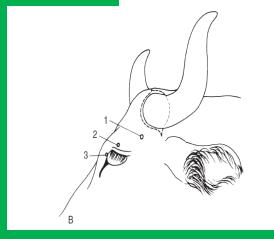
Technique of cosmetic dehorning



 cornual nerve block and local analgesic infiltration caudal to horn base and in midline sedation occasionally indicated



- clip band 8 cm wide over poll and around base of each horn
- routine skin preparation



Cornual nerve blocks for dehorning

Dr. Ayad

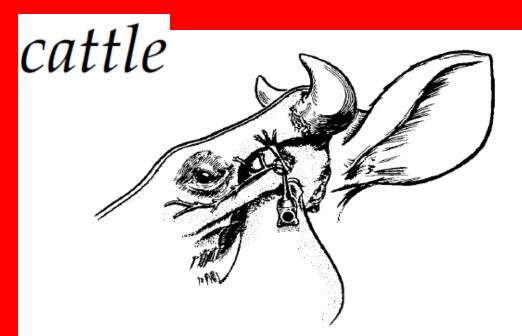


FIG. 12.3 Injection of the nerve to the horn core. In some animals the branch to the caudal part leaves the parent trunk proximal to the normal site for injection.

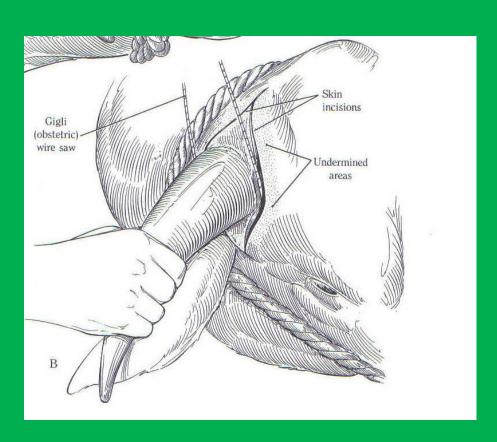
goats



FIG. 13.1 Nerve blocks for dehorning of goats. The cornual branches of both the lachrymal and infratrochlear nerves must be blocked. Care must be taken in young kids to ensure that attempts to block both nerves do not lead to injection of toxic quantities of local analgesic solution.

Technique of cosmetic dehorning

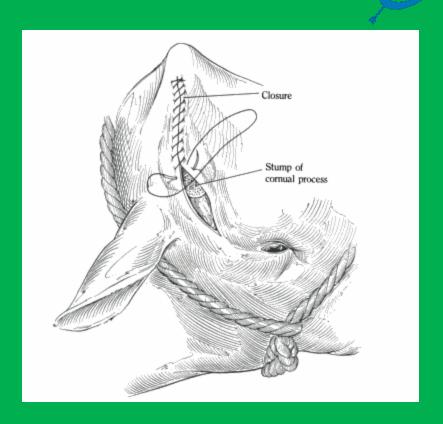
- wait five to ten minutes
- check with needle that skin adjacent to horn is painless
- obtain adequate restraint of head



- make transverse incision over poll and laterally in curved fashion passing 0.5 cm from horn-skin junction, the two wounds joining lateral to horn base and continued towards mandible joint
- undermine skin peripherally from incision far enough to avoid skin
- damage when horn is removed (sterile bone chisel and hammer, Barnes
- gouge) until cut is exactly flush with frontal bone
- clean surface with sterile swabs and effect haemostasis

Technique of cosmetic dehorning

- undermine skin further to enable edges to be apposed across bone surface without excessive tension, then check cosmetic appearance
- appose edges with interrupted sutures of monofilament us polypropylene
- clean surface of all blood and debris, and apply antibiotic powder
- remove sutures in 14 days



Dehorning shears by Keystone dehorner

Dr. Ayad

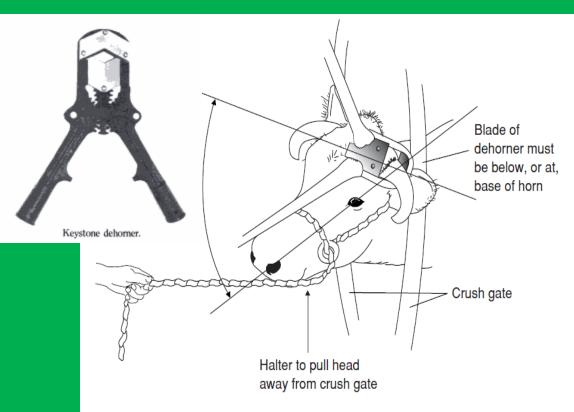


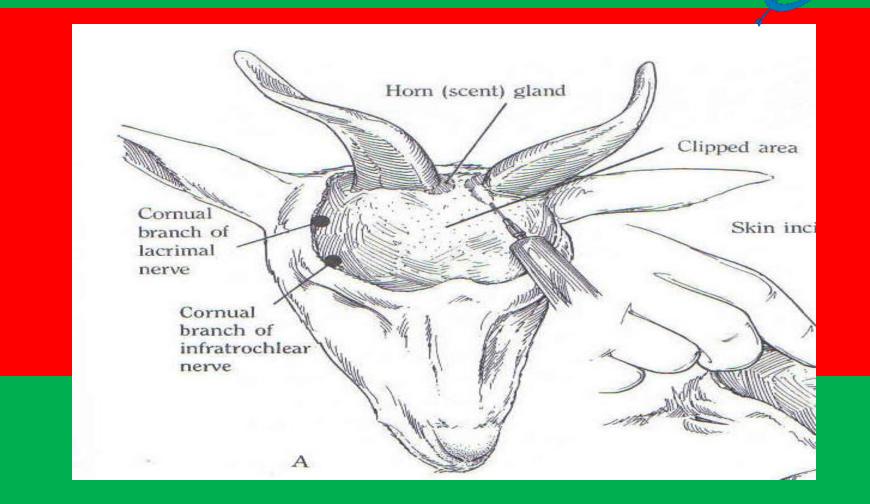
Figure 2.2 Position of cow's head and of dehorning shears (Keystone) or saw. Note that (a) haltered head is pulled forwards away from crush gate, and to side; (b) cutting angle should be $30-45^{\circ}$; (c) blade or wire is placed onto skin of horn-skin junction.

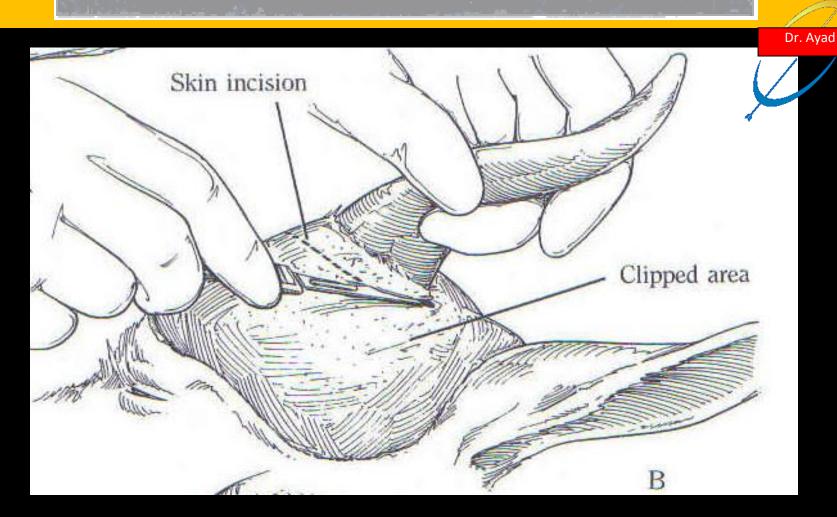
Dehorning shears (e.g. **Keystone dehorner**) is the most rapid method but causes considerable hemorrhage and has a major disadvantage analgesia is absent or poor, sudden violent movement of the head (avoided by firmly anchored halter!) during closure of the guillotine blades can cause a shear fracture of the frontal bone and secondary wound problems including frontal sinusitis.

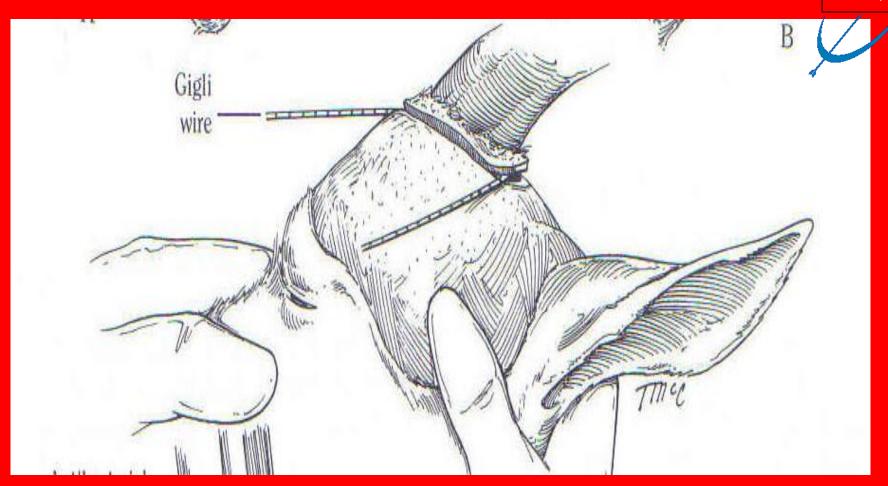
Dr. Ayad

Haemostasis

- torsion or torsion/traction on the 2–3 major vessels in the medial aspect
- (ventral crescent) of the peripheral skin; they are easily identified and
- picked up by artery haemostatic forceps, six to eight turns are optimal
- rubber tourniquet or string around the two horn bases (such as rubber
- bands made from cross-sections of car inner tubes or baling twine) applied
- in pattern to exert pressure on dorsal horn border as well
- alternatively push wooden toothpick into bone canal from which considerable
- cautery, e.g. hot iron, electrocautery, is often disappointingly ineffective
- liberal use of bacteriostatic (e.g. non-sterile furazolidone or sulphanilamide)
- or haemostatic powder (Fe salts, tannic acid, alum)







Dr. Ayad Antibacterial powder Frontal sinus opening Bandage

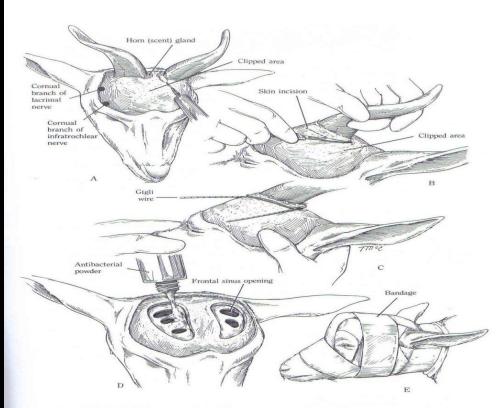


Fig. 17-1. A to E, Dehorning the mature goat.