***Dehorning by Hot iron (Thermal cautery)***

Hot iron dehorners are available in versions heated by a furnace or fire, 12-volt battery, 120-volt electricity, power packs (e.g., Buddex™) or butane/ propane/ liquid petroleum gas. The head of the iron is a hollow circle and it fits over the horn bud. Proper application of the hot iron will destroy the horn-producing skin at the base of the horn. This technique works well for calves up to 12 weeks old. There are several sizes of dehorning irons. The proper size is one where the burner makes a complete ring around the base of the horn.

**Technique**

1. Administer sedation, analgesia and local anaesthetic.
2. Preheat the dehorning iron to a red colour. Both electric and gas irons work best when they are "red" hot.
3. Wear gloves to protect your hands.
4. Hold the calf's ear out of the way to keep it from being burned.
5. Place the tip of the burner over the horn and apply slight pressure. When the burning hair begins to smoke, slowly rotate the dehorner by twisting your wrist.
6. Continue the application of heat for 10-15 seconds. Do not leave the dehorner in place for much longer, especially in young calves. Heat can be transferred through the thin bones of the skull and damage the calf's brain i.e. thermal meningitis.
7. Dehorning is complete when there is a copper-coloured ring all the way around the base of the horn.
8. The horn bud or button will slough off in 4 to 6 weeks.

**Advantages**

* bloodless
* can be used at any time of the year
* used in young calves up to 12 weeks of age

**Disadvantages**

* unreliable when done incorrectly, leads to scurs (partial horn growth)
* requires expertise - pain control and technique
* more painful than caustic paste method
* requires more physical restraint than paste disbudding
* poses greater risk of injury to handler