INTRA OPERATIVE TECHNIQUE FOR DIGIT AMPUTATION IN CATTLE

Amputation through distal third of proximal phalanx

Method of amputation obliquely through distal third of proximal phalanx without preservation of skin flap, is preferred method:

Apply tourniquet above fetlock or hock, if not already in position for IVRA

- incise interdigital space close to affected digit along whole length, continuing proximally 3 cm dorsally, and 2.5 cm at plantar aspect
- insert embryotomy (obstetrical/ Gigli) wire into incision and adjust to a level 1–2 cm above axial aspect of proximal interphalangeal joint
- with assistant firmly holding digit down towards ground, saw rapidly at an oblique angle so that cut emerges 2–3 cm above abaxial joint level, continuing through skin (See photo below)
- trim off protruding interdigital fat pad
- twist off any major vessels e.g. dorsal digital artery lying axially
- examine cut surface meticulously for signs of s.c. abscessation and necrosis, peritendinous infection and septic tenosynovitis
- massage distally along deep flexor tendon sheath to check synovia
- purulent synovia should be irrigated out of tendon sheath (male dog catheter, 50 ml syringe and saline), and reconsider need for resection of part of deep flexor tendon
- dress wound with oxytetracycline or sulphadimidine powder (not essential),

apply gauze swab or paraffin-impregnated tulle, and hold in place by pressure bandage and possibly protect by waterproof covering (e.g. duct

tape)

- in bandaging avoid pressure necrosis around accessory digits
- remove tourniquet
- inject single prophylactic dose of ceftiofur or long-acting oxytetracycline

and, in known risk areas, tetanus antitoxin

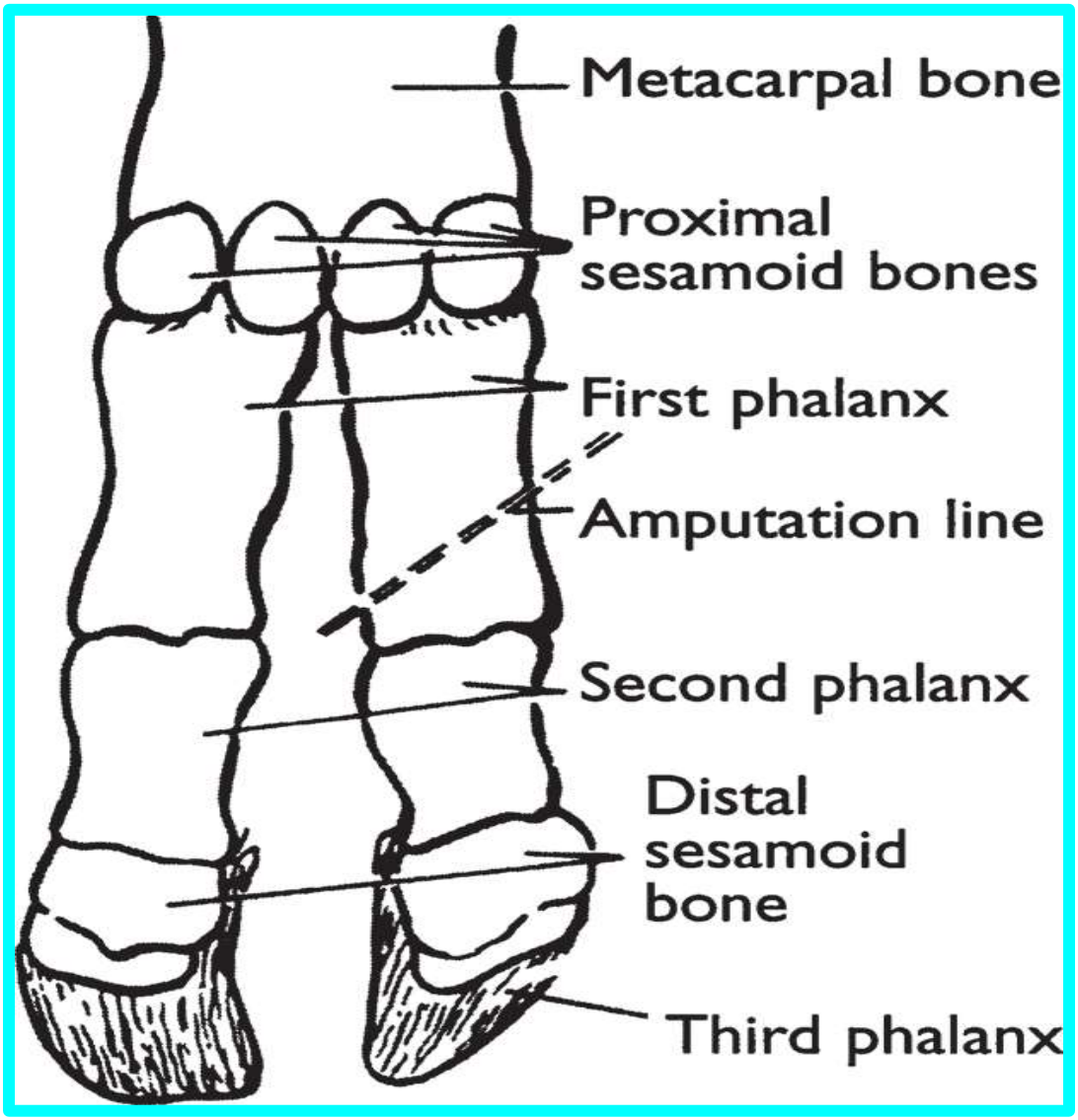

Diagram indicating the line of demarcation for amputation of the digit

Skin flap preservation

Skin flap may be preserved and placed over amputation surface, following removal of digit through distal one third of proximal phalanx. Advantage is cosmetic improvement and faster healing.

Disadvantages include:

- inability to inspect amputation site when dressing is changed
- suture tear out due to post-operative swelling
- risk of skin necrosis
- good case selection is essential (no phlegmon present)

Skin flap is created initially by semicircular incision from 5–6 cm above interdigital space on dorsal and plantar aspects, passing down to the coronary band. Ensure this flap is large and thick, and is then reflected proximally. Amputation is done in conventional way and skin flap, trimmed as needed, is then sutured over stump.