

# Management of dystocia in canines

1. Digital manipulation for per- vaginal delivery

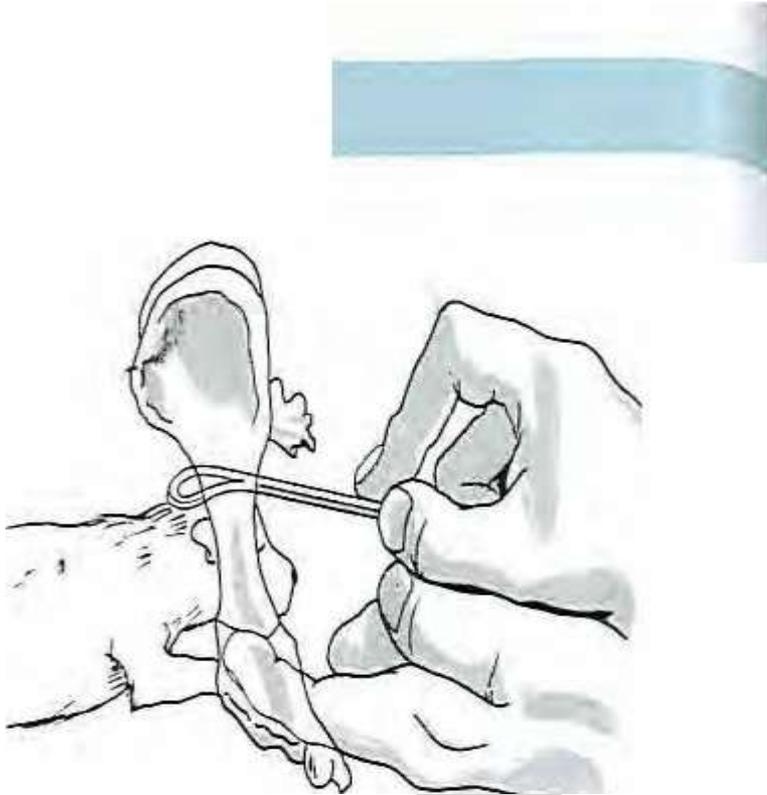
2. Medical management

3. Surgical management

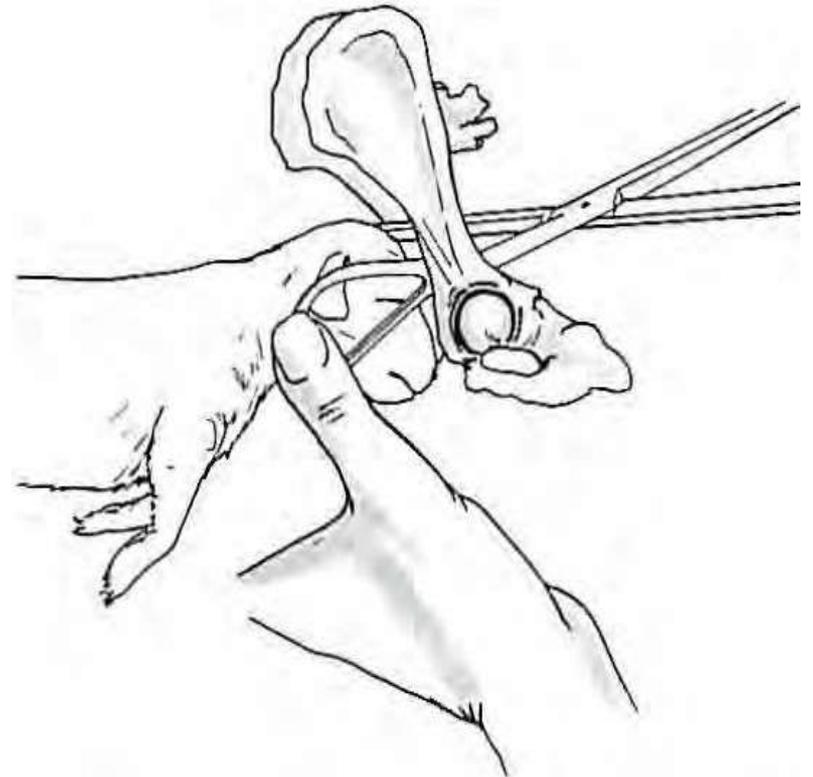
(cesarian section , episiotomy , emergency operations. ie – inguinal metrocele)

***Digital manipulation for per-  
vaginal delivery***

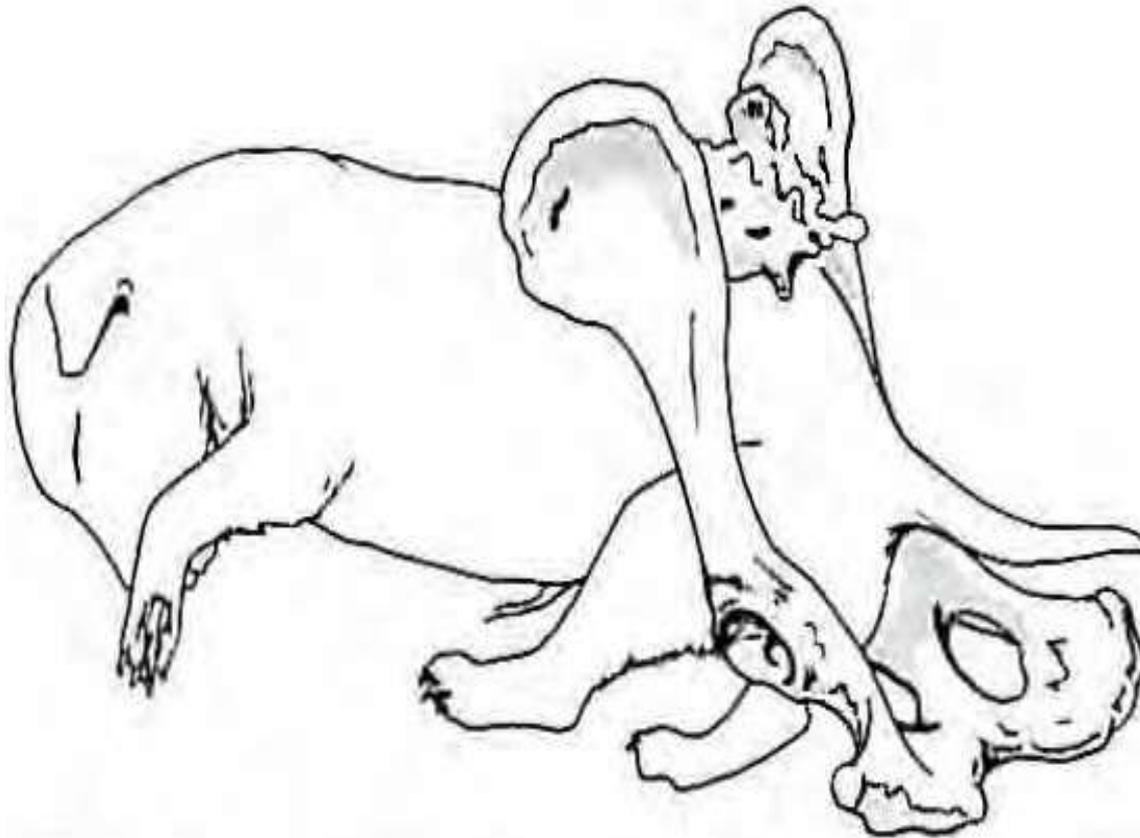
Traction applied to a puppy's head using the vectis and finger.



Delivery of a puppy with retention of the forelimbs using Hobday's forceps. While the position of the fetus is fixed through the abdominal wall with the left hand, the forceps are applied to the skull with the right.

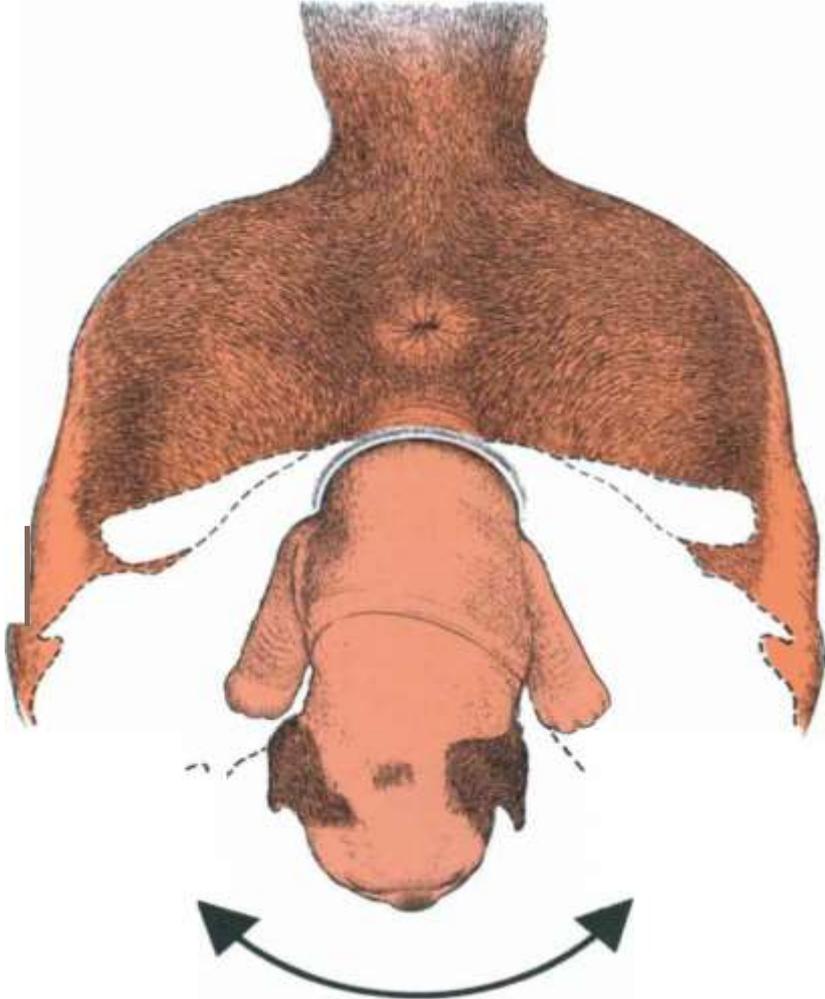


Bilateral hip flexion posture (breech presentation).

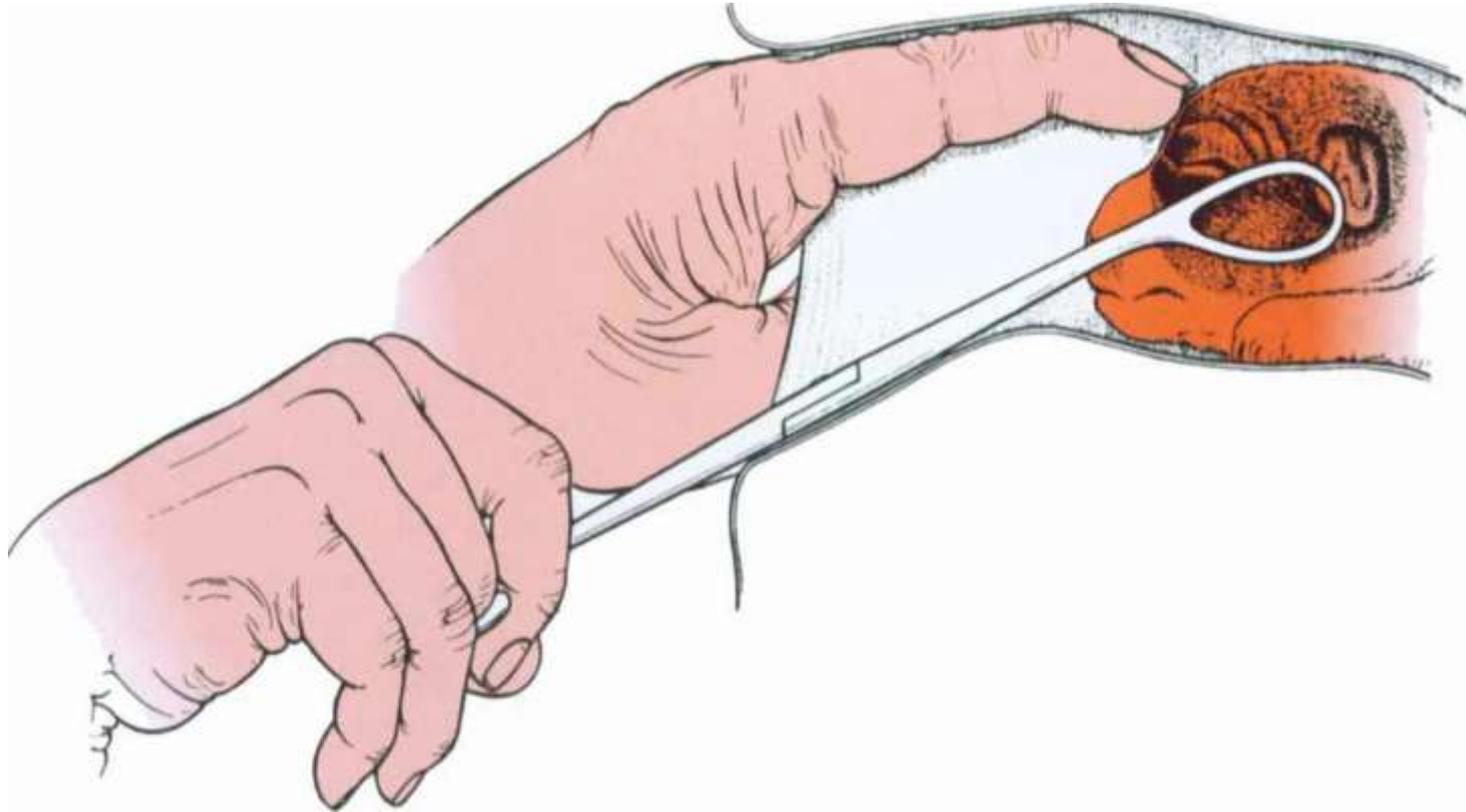


Passage of the fetus through the vagina and vulva may be aided by moving it from side to side while careful traction is applied.

Gentle traction is applied to the fetal head.



## Forceps delivery



## ***Forceps delivery in our department***



Contin.....



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# ***Medical management***

## Suggested Protocol for Medical Management of Canine Dystocia

If any of the criteria for cesarean section are identified during this protocol, proceed to surgery without delay.

**Step 1:** Perform a physical examination and a sterile vaginal examination

attempt digital manipulation of fetus if needed.

**Step 2:** Place IV catheter collect blood sample  
*measure*

packed cell volume

total protein

blood urea nitrogen

glucose

calcium, and electrolytes

start IV fluids; correct deficits as needed.

**Step 3:** Obtain abdominal radiographs

conduct abdominal ultrasonography or Doppler

ultrasonography for fetal heart rates

**Step 4:** Administer low-dose oxytocin (1–3 IU) SC or IM <sup>a</sup>

. Continue monitoring fetal heart rates every hour

**Step 5:** If 30 to 45 min pass without delivery of a puppy, administer 0.5–1.5 ml/kg calcium gluconate (10%) IV slowly over 20 min while monitoring the electrocardiogram

**Step 6:** Follow calcium administration with a repeat dose of low-dose oxytocin, or increase oxytocin dose to 1.1–2.2 IU/kg (5–20 IU) SC or IM. <sup>b</sup>

**Step 7:** If another 30 to 45 min pass without delivery of a puppy, administer a third dose of oxytocin.<sup>c</sup>

**Step 8:** If no puppies are delivered within 30–45 min after the third dose of oxytocin, proceed to cesarean section.

**a** - Oxytocin may be administered as a dilute IV solution (10 IU/L). Start infusion at 6–12 ml/hr.

**b** - Increase IV infusion to 12–20 ml/hr while giving calcium gluconate IV.

**c** - Increase infusion to 20–30 ml/hr. If uterine tetany is observed, reduce IV oxytocin infusion by 50%.

# Dosage of oxytocin

- Doses have historically been reported as high as 5–20 U administered IM in the dog.
- However, recent data suggest that doses as low as 0.5–2 U are more effective in increasing the frequency and quality of the contraction

Initial doses of 0.1 U/kg are recommended and the dose can be increased incrementally to a maximum of 2 IU/kg (never to exceed 20 U/dog in any breed) are recommended

Most authors advocate oxytocin administration at 30–40 min intervals

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