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Topic : Care of new born

Objective : To reduce the calf mortality at the time of birth

Care of new born

- During intrauterine life, the foetus is nursed entirely by dam.
- At the birth , the maternal connections are severed due to rupture of umbilical cord resulting in cessation of nutrient and oxygen supply to foetus.
- Various measures can be taken to reduce new-born mortality:

1. To initiate respiration

- Remove mucus from the nostril and mouth with the help of fingers.
- Draw out the tongue to and fro.
- Blow air into the nostrils.
- Vigorously rub the chest with a gunny bag or towel. This tactile stimulus may stimulate stimulus respiration.
- Hold the hind legs of newborn and swing backward and forward resulting in discharge of copious quantity of fluid or mucus from the larger bronchii, throat nose.

- Pinch the foetal nose.
- Tickling the nasal mucosa with straw.
- If all the above methods fail , respiration can be stimulated by quickly giving 40-100 mg doxapram hydrochloride to the calf by intravenous injection or sub – lingual injection.
- The upper chest wall is raised and lowered ,holding it by the humerus and the last rib. This may help to achieve the strong negative intrathoracic pressure required for the first breath.

- NOTE : excessive pressure should not be applied externally to the ribs to avoid the possibility of fracture or damage of underlying organs such as lungs and liver.
- Once spontaneous breathing is established the calf may be given further care. Severe dyspnoea may occur in immature calves and these animals should be given an intravenous injection of 2-4 mg of dexamethasone which encourages surfactant production

2. Prevention of umbilical infaction

- If the umbilical cord is not ruptured, it should be ligated at about 2 inches from the umbilicalus and severed with scissors , and the stump should be cleaned with antiseptic. The navel cord should not be tied but allowed to drain if bleeding is not so profused.
- To this stamp, tincture iodine should be applied . The ligation should be removed within 12-24 hours.

3. Thermo-regulation :

- Ensure that there is adequate milk intake.
- Arrange the birth to occur in a thermally neutral environment as far as possible.
- New born puppy should be placed in an environmental temp. Of 30-33 °C for the first 24 hours , which can be reduced to 26-30 °C by 3 days.
- The new born coat should be adequately and quickly dried .
- Suitable jacket should be provided in winter.
- **NOTE : THE NEW BORN HAS LITTLE SUBCUTANOUS FAT AND HENCE INSULATION IS POOR.**

4. MANAGEMENT OF ACCIDOSIS

- The foetus at the time of a normal birth will usually have a mild metabolic and respiratory acidosis.
- Dystocia is likely to cause a severe respiratory and metabolic acidosis.
- Severe acidosis has an adverse effect on both respiratory and cardiac function.

Signs of acidosis

- Abdominal breathing
- Poor body muscle tone
- Low heart rate
- Prolonged jugular filling time
- Absence of pedal reflex
- Time to attain sternal recumbency (T-SR) is greater than 15 minutes.

- If there is no signs of spontaneous improvement , give 250-500 ml. Of 4.2% sodium bicarbonate by slow intravenous injection.





Effects of acidosis

- Poor colostrum uptake
- Shortening of the period during which the calf is normally able to antibodies
- Reluctance to move
- Abomasal atony
- General dullness
- Inability to suck the milk.

5. Colostrum feeding

- The young one should get first colostrum within first two hours after.
- In case colostrum is not available, 200-500 ml of dam blood or serum should be injected subcutaneously to young one of large animal and in smaller animals, 20-100 ml to their young one

6. Milk feeding

- The rate of milk feeding should be about 10% of the calf's weight per day upto a maximum of 5-6 litre/day.

7. Regular vaccination

8. Dehorn the calf at an early age, preferably within 15 days.

9. Inspection of natural orifices

- The new born should be examined carefully to ascertain that all the natural orifices are patent and if not , a timely surgical intervention is necessary.

10. Retained meconium

- The meconium may be retained. In such cases, the newborn shows colic symptoms and lack of appetite.
- The enema of saline , soap and water or glycerine or castor oil should be given in this condition.

11. Persistent urachus

- It is characterized by continuous dribbling of urine through urachus.
- Cauterize the affected part with tincture iodine.

12. Diseases of newborn

- White scour
- Navel ill or joint ill
- Calf diphtheria
- Calf pneumonia

THANK YOU