

POSTPARTUM CARE OF DAM AND NEWBORN



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Overview

- Importance
- Care of dam
 1. Before parturition
 2. During parturition
 3. After parturition
- Care of newborn calf
 1. Immediately after birth
 2. Management later on (during first few days after birth).

Introduction



- Ensuring profitability of dairy farming.
- Reproduction plays a vital role.
- Sound feeding and management.
- Majority of calf growth occurs during last 2 months of gestation.

Regular
reproduction



Production

Reproduction
and
production


- Nutrition
- Health care

Management
of dam

- Quality of colostrum
- Health of calf

Care of dam



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- Balanced feeding with adequate minerals and vitamins.
 - To minimize health problems around parturition.
 - To improve the immune system of dam so as to prevent mastitis just before and after parturition.

Before parturition

1. Turning cow into a separate room

- ❖ To avoid any accidents
- ❖ Clean, properly disinfected, comfortable bedding
- ❖ Ample amount of water

2. Guarding against milk fever

- ❖ High yielders and first calvers at risk
- ❖ Avoid prenatting (milking prior to calving)
- ❖ Enough minerals esp. calcium
- ❖ Large doses of Vit. D a week prior to calving (1m unit/45 kg body weight)



Soft, comfortable
bedding

Milk fever
(typical posture)



3. Dry period

- ❖ 45 to 60 days of dry period.
- ❖ Ensuring normal fetal development, optimal milk production and good udder health.

4. Watch for primary signs of parturition

- ❖ Udder enlargement, relaxation of sacro-schiatic ligament, thick mucus discharge from vulva, restlessness, glossy appearance of teats.




During parturition

- Uneasiness due to labour pain.
- Animals seeks isolation.
- Watch from a distance, do not disturb.
- Time taken to expel the fetus, 2-3 hrs in pluripara while 4-5 hrs in primipara.
- Watch for fetal presentation.
- Any deviation or delay, provide assistance.
- Do not apply excessive force, in case of dystocia.



After parturition

- ❑ Supply lukewarm water
- ❑ Protection from any environmental stress, both extreme cold or heat.
- ❑ Prevent consumption of afterbirth by dam.
- ❑ Clean the dam and premises.
- ❑ Feeding of moistened bran mash mixed with molasses.
- ❑ Watch if placenta is shed within 5-6 hrs, if delayed, provide treatment immediately.

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- Milk the animal after parturition, do not milk completely.
 - Milking thrice a day initially till udder inflammation subsides.
 - Provide laxative, palatable and nutritious diet.
 - Provide enough minerals esp. calcium and phosphorous.

Care of new born calf



Immediate care

1. Help to initiate respiration

- ❖ Remove mucus from nostrils
- ❖ Hold the hind legs of newborn and swing to and fro to remove copious fluid from large bronchi, throat and nose.
- ❖ Rubbing of chest
- ❖ If fails to breathe, inj. Doxapram hydrochloride @ 40-100 mg i/v or sub-lingual route.
- ❖ Cow should be allowed to lick the calf.
- ❖ Clean and dry the calf immediately.
- ❖ Protection from viscous dam.



2. Colostrum feeding

- ❖ Immediately after birth (30 mins to 2 hours)
- ❖ 1st milking – true colostrum
- ❖ For next 2-3 days – transition milk
- ❖ Primary source of nutrition
- ❖ Rich in minerals (2-3 times) and proteins (5 times) as compared to milk.
- ❖ Lower in lactose (prevents diarrhoea)
- ❖ Provides immunity to calf




3. Prevention of Umbilical infection

- ❖ Should be ligated at about 2 inches from umbilicus, severed and cleaned with antiseptic.
- ❖ Dipped in 7% tincture iodine.
- ❖ Ligation should be removed within 12-24 hrs.
- ❖ If care not taken, may lead to “navel ill”.

4. Thermoregulation

- ❖ Calf's body temperature falls immediately after birth, recovers within few hours.
- ❖ Thermoregulation can be controlled by:
 - i. Metabolic rate increases 2-3 times the fetal rate soon after birth.
 - ii. Reducing the heat loss.

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- ✓ Glycogen and adipose tissue low in calf.
 - ✓ Provisioning of immediate and adequate food.
 - ✓ Birth environment should be thermally neutral.
 - ✓ Coat should be quickly and properly dried.



Management later on

1. Management of acidosis

- ❖ Normally, mild metabolic and respiratory acidosis.
- ❖ Severe acidosis after dystocia.
- ❖ Signs like abdominal breathing, low heart rate, poor muscle tone, absence of pedal reflex and time to attain sternal recumbency > 15 mins.
- ❖ If no spontaneous improvement, 250-500 ml of 4.2% sodium bicarbonate by slow i/v route.

2. Milk feeding @ 10% body weight/day upto a max. 5-6 litre/day.
3. Inspection of natural orifices.
4. Retained meconium – colic like symptoms and lack of appetite.
 - ❖ Enema with saline, soap and water/ glycerine/ castor oil feeding.
5. Persitent urachus
6. Diseases like calf scour, navel/ joint ill, calf diphtheria, calf pneumonia.
7. Disbudding within 15 days of birth.

