



IDENTICAL TWIN FEMALE CALVE BORN IN FIELD CONDITION

Nishant Singh Saini ¹, Amit Kumar ^{*2}, Sapna Bisht ³ and Kamal Kant Yadav ⁴

¹ Veterinary Officer, Government Veterinary Hospital, Teliwala Dist. Haridwar, INDIA

^{*2} Veterinary Officer, Government Sheep Breeding Farm, Kopardhar Dist. Tehri Gharhwal, INDIA

³ Veterinary Officer, IPDP, Government Veterinary Hospital, Karanprayag Dist. Chamoli, INDIA

⁴ Veterinary Officer, Government Veterinary Hospital, Jhabrera Dist. Haridwar, INDIA

Abstract:

A repeat breeder crossbred cow was presented to clinic and after treatment with this condition animal was come in heat with clear mucous than artificial insemination was done and animal become pregnant and regularly monitoring health of the animal than delevered twin female calf after artificial insemination.

Keywords:

Twin calf, Monozygotic, Dystocia, Artificial insemination, Cow.

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1. INTRODUCTION

Cow is a uniparous species that means females give birth to one offspring in most of the parturition. On the other hand, the natural incidence of multiple births in cattle is largely due to multiple ovulations and is around 1-5%, depending on breed, parity and environmental conditions (Sreenan and Diskin, 1989). Twins are classified as fraternal (dizygotic twins) or identical (monozygotic twins), based on their origin, the most common being fraternal. Since fraternal twins originate from two separate ova or eggs, multiple ovulations from the same ovary or one from each ovary must therefore precede dizygotic twinning. Identical twins are genetically and physically same result from dividing or splitting of an embryo during early development that is within 8 to 10-day after conception (Echternkamp and Gregory, 2002). Identical births are biologically a unique phenomenon, which occurs for about 2 -10% of all liked sexed twins in cattle (Hancock, 1954). Twin birth is an unavoidable issue in uniparous animal production systems since several factors such as breed, genetics, parity, and some other environmental effects greatly influence twinning rate of the cow. Thus twin calving lessen overall cow reproductive efficiency, productivity and profitability. The birth of live identical duplets (both female) in a crossbred cow is a rare event and hence it is documented.



2. CASE HISTORY AND MANAGEMENT

A 4 years aged crossbred cow weighing about 300 kg was presented at Government Veterinary Hospital, Teliwala (Haridwar) with a history of repeat breeding. Animal owner said that last three times animal was inseminate through natural service but failed to conceive. Animal was shown the sign of heat at regular interval as per animal owner. All physical condition and clinical parameters are in good condition. Deworming was done by Nilzan@100ml PO once and 50g mineral mixture given with feed per day. In the next heat animal was inseminate by Artificial insemination on 01/03/2014. Ovulation rate was measured by counting the number of corpus luteum observable on the surface of the ovaries 10 days after ovulation that is 11/03/2014. Only one CL was palpable on left ovary. Pregnancy was diagnosing by transrectal palpation of the reproductive tract on 03/06/2014. After palpation two live foetuses were feeling. We provided with a higher plane of nutrition and increased obstetrical care before and after calving. On the day of parturition (02/12/2014) animal owner was reported that animal is in pain and frequently sits and stands up. After examination the animal, complete relaxation or dilatation of the cervix was seen. Lateral deviation of head of the first foetus was seen. By using the liquid paraffin head of the fetus was corrected by applying the pressure with the help of hand. Live female calve was recovered by applying the manual traction. After 15 min of first birth the second live female calve was born with any traction. post-operative fluid therapy (4 litres of Normal saline and 3 litres of Dextrose normal saline IV), antibiotic (4.5 g of ceftriaxone-tazobactan IV; Intacef-Tazo[®], Intas Pharmaceuticals Ltd, Ahmedabad, India), anti-inflammatory (75 mg of meloxicam IM; Melonex[®], Intas Pharmaceuticals Ltd, Ahmedabad, India), 100 mg chlorpheniramine maleate IM (Anistamin[®], Intas Pharmaceuticals Ltd, Ahmedabad, India), calcium magnesium borogluconate infusion (Mifex[®], Novartis India Ltd, Gandhinagar, India), and 10 ml multivitamin injection (MVI[®]) were administered.

3. DISCUSSION

The primary objective of this paper is to reports on twinning in cattle and some of the management factors relevant to a twinning in cattle. The frequency of monozygotic twins was made on data from various sources with the result that 11.6 % of all like-sexed twin pairs were monozygotic and also neither the effect of breed nor age of the dam was considered (Johansson et al., 1974). Difficult birth was more frequently encountered with twin births that were similar reported by Çobanoğlu, O. 2010. Abnormal presentation is the major causes of dystocia in twinned cattle that was also confirmed Echternkamp and Gregory (2002). Female gave more than one calf have more prone to detrimental or negative effect on his health, reproduction as well as productivity. On the other hand, if proper and regularly examine the animal and provide appropriate management system to twin-bearing cows with nutrition program to feed them in proper manner, so we are able to save the life of animal as well as calf.



Fig 1 : Animal Owner with twin female calf

4. ACKNOWLEDGEMENT

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