

Hemolactia in Goat : A Case Report

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Abstract A none descript pregnant goat of about two years of age, weighing 30 kg was presented with the complaint of blood in milk for the last two days. On the basis of clinical symptoms and diagnostic tests, the case was diagnosed to be of hemolactia. The treatment was conducted with injection amoxicillin and sulbactam at the dose rate of 300 mg, once a day intramuscularly for three days along with 2 ml intramuscular injection of tranexamic acid and mafenamic acid for five days. 1ml of adrenalin was mixed with 4 ml of normal saline and infused intramammary daily for three days. Five tablets of vitamin C were dissolved in distill water and given as drench once in a day for seven days. 30 ml of calcium borogluconate were administered intravenously followed by subcutaneous injection once. 10 ml oral calcium preparation was prescribed twice in a day for seven days and ice cold fomentation of the udder was advised. The clinical signs in the ailing goat started improving after two days of treatment and goat completely cured after seven days of treatment.

Keywords Hemolactia, Bloody milk, Goat.

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Introduction

Blood in milk or hemolactia is a state of physiological hyperemia of the mammary gland that is occasionally seen towards the end of gestation and for a short period just after parturition. Among farm animals hemolactia is relatively common in both heifer and multiparous cows. Although the condition occurs sporadically, in certain geographic locations but an incidence rate of over 50% has been reported in some herds [1, 2]. Usually blood in milk may be due to penetrating lacerations, wounds, whip injuries, horn pokes and straining of the tissues. As a result there are localized or widespread areas of blood diffusion into the connective tissue of the skin of the udder or in the wall of the cistern. However, sometimes blood may appear in the milk even in the absence of any sort of injuries or trauma. It may be attributed to acute or chronic mastitis, vitamin C deficiency, calcium deficiency, feeding of feedstuffs belonging to family Rubiaceae [3]. A meager literature is available in this regard and in goats, the condition is very uncommon. In the present study, successful therapeutic management of a goat with the complaint of hemolactia was done.

Case history

A none descript goat of about two years of age, weighing 30 kg was presented to TVCC, College of Veterinary Science and AH, Jabalpur (MP) with the complaint of blood in milk for the last two days. As per the owner, the goat was pregnant for the first

time. On through physical examination, it was concluded that there was no any injury to the udder but the udder was pinkish in color and animal exhibit pain on palpation of the udder. When milked, the milk was pink in color. However when examined from the back of the animal, no change in the shape of udder was observed. Animal was feeding, defecating and urinating properly. There was no change in color of urine. Clinical examination of goat revealed normal body temperature, respiration and pulse rate. Ultrasonography revealed single live foetus and advanced stage of pregnancy in the goat. Hematological investigations revealed hemoglobin as 10 gm/dl and total leukocyte count as $10 \times 10^3/\mu\text{l}$. California mastitis test was conducted in the ailing goat and the results were negative for presence of mastitis. On centrifuging the pink milk collected from the affected goat, RBCs were settled at the bottom.

So on the basis of clinical symptoms and diagnostic tests, the case was diagnosed to be of hemolactia.

Materials and Methods

The goat was treated with the injection of amoxicillin and sulbactam at the dose rate of 300 mg, once a day through intramuscular route for three days along with 2 ml intramuscular injection of a combination of tranexamin acid and mafenamic acid for five days. 1ml of adrenalin was mixed with 4 ml of normal saline and infused intramammary daily for three days. Five tablets of vitamin C were dissolved in distill water and given as drench once in a day for seven days. 30 ml of calcium borogluconate were administered intravenously followed by subcutaneous injection once followed by 10 ml oral calcium preparation twice in a day for seven days. The clinical signs in the ailing goat started improving after two days of treatment and goat completely cured after seven days of treatment. The owner was advised for ice cold fomentation of the udder. The efficacy of the therapy was judged on the basis of clinical recovery absence of bloody milk.

Results and Discussion

Hemolactia may occur as a result of small focal areas of hemorrhage by diapedesis. This occurs quite frequently in newly freshened animals without evidence of disease and is characterized by presence of erythrocytes in the alveoli. Sometimes, the erythrocytes in the milk are sufficient enough to impart a pinkish tinge to the milk resulting in red colored milk. Administration of calcium treats the condition of calcium deficiency and moreover calcium has an anticoagulant effect [4].

However, injections of coagulants are likely to give better cure rates than calcium borogluconate [1]. That is why in the present case, combination of tranexamic acid and mafenamic acid was used intramuscularly.

It is well known that the circulatory system of the udder is very sensitive to the vasoconstrictor action of adrenaline. That is why adrenaline is indicated in the treatment of bloody milk. Other causes of bloody milk include vitamin C deficiency [5]. So administration of vitamin C acts as antistress as well as antioxidant therapy. Application of ice cold water or crushed ice helps in control of hemorrhage through vasoconstriction.

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