

# SERO-PREVALENCE OF BRUCELLOSIS IN GOATS AND WOMEN

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A serological study was conducted to assess the seroprevalence of brucellosis in goats and women in far flung Poonch district of Jammu & Kashmir State, where the people are mostly ignorant about the zoonotic diseases. They live in close association of animals and consume raw milk and its products. A total of 200 serum samples, 185 from goats and 15 from women were screened by Rose-Bengal plate agglutination test and Serum Tube Agglutination Test. Goat samples 150 were from apparently healthy animals, and 35 with the history of abortion in the last trimester of pregnancy. Where as all 15 women samples were with the history of repeated abortions and other health problems. Three samples were found positive for brucellosis, two from goats and one from women.

**Keywords:** Brucellosis, goats, seroprevalence, women.

## **Introduction:**

Brucellosis is a worldwide zoonosis with both economic and public health significance affecting the animals and man. In animals, it causes great economic losses by way of loss of milk production, abortion and infertility. In small ruminants, it has gained much attention because of their role in spread of infection to cattle and human beings (Rafi and Afshar, 1987). Human brucellosis is a multiple organ disease that presents with fever and is most often transmitted via contaminated, unpasteurized goat milk and cheese. In chronic cases, focal complications (eg, spondylitis, neurobrucellosis and endocarditis) are frequently seen. Although the disease may be severely debilitating, with low mortality rate. Fatal cases are often due to endocarditis. Because Brucella endocarditis is a rare complication in (2% to 5%), (Al Dahouk, et.al.2006, Miguel, et.al. 2006, Queipo-Ortuño, et.al. 2006). This study was under taken to assess the seroprevalence of brucellosis in goats and women and simultaneously to create awareness about the prevention and control of the zoonotic diseases transmitted through milk and meat.

## **Material and Method:**

Two hundred serum samples, 185 from goats (150 from apparently normal and 35 with history of abortion) and 15 from women with history of abortion in second and third trimester of pregnancy were screened by Rose Bengal Plate Agglutination Test and Serum Tube Agglutination Test as per the method of et.al 1975. The goats were of Gaddies and Bakerwals tribal communities. Some of the women were belonging to the same tribal communities but some were of other rural areas of the district.

## **Result and Discussion:**

Of the 200 samples screened, overall seroprevalence recorded was 1.33% by RBPT and STAT. However, the seroprevalence in goats was 1.61% and in women was 6.66%. The findings in goats were in agreement with other workers (Abdulrashid et.al.1994, Isloor et.al. 1996, Khire et.al. 1998, Marunalini and Ramasastry, 1999), where in 1.5-7.0% prevalence was recorded. The higher prevalence in women may be due to less number of selective samples particularly with the rural background and close association with animals. One goat sample and one women sample was from the same tribal family which suggest transmission of disease because they live in close association of goats and consume raw milk and its products.

## **Acknowledgement :**

The authors are thankful for generous help of Dr. B.K. Kotwal (District Sheep Husbandry Officer Poonch), Dr. B. C. Sharma, Dr. Bukhari, and other staff members for extending full support. Thanks are due to Dr. D.K. Singh Senior Scientist Division of Veterinary Public Health, Indian

Veterinary Research Institute Izatnagar for processing of samples, and Dr. Shanaz Bhatti, Govt community Health Center Poonch for facilitating collection of women blood samples.

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