A-35 A preliminary study on separation of proteins in the epididymal fluid of the goat

D M S Munasinghe, A Horadagoda, R P V J Rajapakse, N A N D Perera,
V K Gunawardana
Faculty of Veterinary Medicine & Animal Science, University of Peradeniya

The epididymis is a very important organ in which sperm mature. Many proteins have been identified as important constituents of the epididymal fluid. It has been reported that they are mainly derived from blood serum. There is a dearth of information on epididymal proteins in the goat. This study was undertaken to elucidate the protein fractions in goat epididymal fluid.

The cauda epididymis was incised and epididymal fluid was collected into capillary tubes and centrifuged for 10 min. The supernatant was re-centrifuged at 14,000 rpm/4°C for 10 min to obtain spermatozoa free epididymal fluid. Goat blood serum was obtained for comparison. Molecular weight markers (78-23kD) were prepared as described by the manufacturer (BDH, U.K.). Proteins of the epididymal fluid and the serum were fractionated by SDS-PAGE. The gel was fixed and stained with Coomassie brilliant blue R-250 and de-stained.

18 distinct bands were seen in epididymal fluid and 9 were detected in serum. 5 bands in epididymal fluid showed similar mobility pattern with t hat of serum. The most prominent band observed in both epididymal fluid and serum was the albumin band (66 kD). In addition, 3 other very distinct bands were observed in epididymal fluid around 56,40 and 22 kD. According to the results of this study, the protein pattern in goat epididymal fluid is different to that reported for the ram. However, it resembled that of the boar.

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