A STUDY ON PREVALENCE OF ESCHERICHIA COLI ASSOCIATED WITH ENTERITIS IN LAMBS IN KASHMIR

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The present communication reports prevalence of serotypes of E. coli isolated from lambs died with lesions of enteritis in Kashmir.

Material and Method:

Materials from intestine were collected from 32 cross-bred lambs received for post mortem and having gross lesions of enteritis in the year 1992. It was put to bacteriological studies. The organisms were isolated (Cruickshank et al., 1975) and identified on the basis of cultural, morphological and biochemical characteristics (Carter, 1973). The strains were confirmed for E. coli and their antigenic structure from the Central Research Institute, Kasauli after their serotyping.

Result and Discussion:

Of, the 48 strains isolated, 8 (16.16%) were untypable and 40 (83.33%) typable. These strains belonged to 14 different 0 serogroups. Predominantly comprising 0154 (7), 0106 (6), 0109 (6), 060 (5), 0111 (4),064 (2), 0101 (2), 0147 (2). 020 (1), 091 (1), 0143 (1), 0145 (1), 0148 (1) and 0159 (1).

The enterotoxic activity of different strains was tested by rabbit ileal loop technique (De and Chatterjee, 1953) using cultural supernatant (Sexena and Yadava, 1982 and Azmi and Jha, 1995). Out of the 14 strains, 5 strains (020, 060, 0106, 0148 and 0154) were found positive for enterotoxicity by ileal loop technique. All these produced mild to serve haemorrhagic fluid. Serotype 020 reported to be associated with infantile gastroenteritis and diarrhoea in calves. Strains 060 and 0148 cause colibacillosis in kids (Vihan and Singh, 1989 and Vihan *et al.*, 1990). The other serotypes were non- enterotoxic in rabbit ileal loop technique. This might be attributed to strain variation, type of enterotoxin produced, or to the varied efficacy of rabbit ileal loops for testing enterotoxicity as observed by Smith and Halls (1967).

Acknowledgement:

The first author thanks Dr. M. A. Chisti, Director Sheep Husbandry Department, Kashmir for Providing the necessary facilities.

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