Occurrence of Cryptosporidial Infection in Immunocomprised Individuals in Kashmir Valley

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The occurrence of Cryptosporidial infection in Immunocomprised individuals was found to be 18.66% in Kashmir Valley. A total of 75 samples were processed & examined & 14 samples were found positive.

Key words: Immunocomprised, Cryptosporidial, Kashmir valley.

Crytosporidiasis, a zoonotic disease caused by crytosporidium species, characterized by enterocolitis and diarrhea in man. The disease has got multiple host range (Dubey et al., 1990; Surumay et al., 2000; Jose et al., 2002; Barwick et al., 2003). It mainly occurs in immunocomprised individuals were the duration of the disease is prolonged (up to 20 weeks) with severe symptoms (up to 71 loose watery motion a day and loss of body fluids up to 17 liters which leads to severe weight loss) and death. Domestic livestock plays an important role in environmental contamination by producing oocysts and human infection have been associated with exposure to infected animals particularly calves and lambs (De-Graff et al., 1999, Mosier et al., 2000). The infection is transmitted predominantly from person to person, but direct infection from contamination of surface water and drinking water by domestic or wild animal feces drinking water by domestic or wild animal feces can also be important (Smith et al., 1990).

MATERIAL AND METHODS

A total of 75 diarrhoeic fecal samples were collected from Immuno-compromised individuals belonging to different places in Kashmir Valley from SKIMS. The samples were
diluted 1:5 with normal saline and sieved through strainer to remove coarse particles. After centrifugation, 15ml of Sheather’s sugar solution was used for the separation of oocysts. A thin layer of supernatant was taken on glass slide by platinum loop. Direct thin fecal sample smears were also made to determine the fecal shedding of Cryptosporidial oocyst. Both the slides were stained following modified Kinyoun’s acid fast staining method (Current & Garcia, 1991). Identification of Cryptosporidial species oocysts was done by observing under oil immersion by phase contrast microscope.

RESULTS AND DISCUSSION

Out of 75 diarrhoeic fecal samples processed and examined for cryptosporidial species oocyst, 14 samples were found positive with occurrence of 18.66%. Though the infection occurs both in immunocompetent and immunocompromised individuals but in immunocompetent individuals the disease results in self limiting diarrhoea. But in Immunocompromised individuals the diarrhoea is severe.

REFERENCES