**Original article:**

**Comparison of stool concentration methods for detection of prevalence of enteroparasitic infection in rural tertiary care teaching hospital of Maharashtra**

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**Abstract :**

**Background**: Intestinal parasitic infection is one of the major health problems in many developing countries. The prevalence of intestinal parasitic infections not only varies in different parts of the world but also in different regions of same country.

**Methods:** A total of 856 patients attending out-patients department and admitted in wards, who presented with complaints of diarrhoea, vomiting, abdominal pain and weight loss were included in the study. Stool samples collected from these patients were screened for the presence of intestinal parasites as per standard parasitological protocols. Comparison of formol ether sedimentation and zinc sulphate centrifugal floatation technique for detection of enteroparasites was done.

**Results**: Intestinal parasites were detected in 145 stool samples by direct saline and iodine mount. *Ascaris lumbricoides* followed by *Ancylostoma duodenale* and *Taenia* species were the common intestinal parasites. *Entamoeba histolytica* was the most common intestinal protozoa. Coccidian parasites like *Cryptosporidium parvum* and *Isospora belli* were detected in the HIV infected patients only. The total prevalence of intestinal parasites by formol ether sedimentation technique is 26.75% while by zinc sulphate centrifugal floatation technique prevalence is 17.64%.

**Conclusion**: Intestinal parasitic infections are worldwide in distribution. Their prevalence in rural areas is high due to poor sanitation and lack of personal hygiene. Early and prompt diagnosis of intestinal parasitic infections is important as in addition to morbidity and mortality, they contribute to malnutrition, growth retardation and diminished work capacity.

**Keywords**: Ascaris lumbricoides, coccidian parasites, Entamoeba histolytica, stool concentration techniques.