

# A Case Report of Strongyloidiasis Associated with Giardiasis in a Patient with Renal Calculi from a Tertiary Care Center in South India

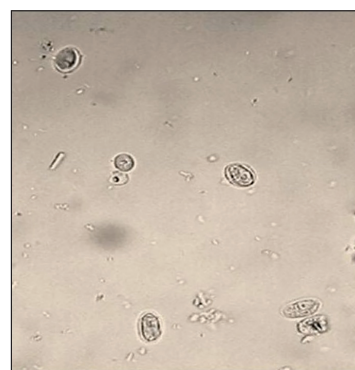
Sir,

We report a case of 30-year-old male with multiple renal calculi in both kidneys along with *Strongyloides stercoralis*, *Giardia intestinalis*, and *Entamoeba coli* found in the stool sample. He had presented with history of dull aching nonradiating abdominal pain with few episodes of self-limiting diarrhea for past 6 months, nausea and dysuria for past 3 months. Routine blood and urine investigations were normal. On ultrasonogram, the patient was found to have multiple hyper echoic areas conclusive of calculi in both the kidneys with largest one of 14 mm × 7.6 mm in size. Microscopic examination of stool showed, motile rhabditiform larvae of *S. stercoralis* approximately 250 μm with short buccal cavity, double bulb esophagus [Figure 1]. Oval cysts of *G. intestinalis* about 10 μm in size with axostyle and prominent nuclei were observed [Figure 2] along with spherical multi nucleated cysts *E. coli*. Subsequently the patient was treated with metronidazole 400 mg thrice daily for 5 days and thiabendazole 760 mg twice daily for 3 days. A repeat stool examination was done after 10 days and revealed no larvae, cysts or occult blood with improved patient compliance. The patient was also treated for renal calculi in the urology department. Polyparasitic infections, though rare tend to occur more commonly in immunocompromised people.<sup>[1]</sup> Polyparasitism were reported by Dinleyici *et al.*<sup>[2]</sup> and Rai *et al.*<sup>[3]</sup> in immunocompetant. *E. coli*, though commensals of the intestine, were also reported by Wahlgren as a causative agent of chronic diarrhea.<sup>[4]</sup> In our case, the presence of *E. coli* could be a commensal and not a pathogen. However, the symptoms were suggestive of chronic parasitic infection. The pathogenesis of various glomerular diseases and the parasites has been reviewed by van Velthuysen and Florquin as a role of immune mediated damage to the glomerular epithelium.<sup>[5]</sup> But until date, no data are available to show the association of these parasites and renal calculi. This emphasizes the need of future studies to describe the coexistence of parasitic infections with various other systemic diseases.

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**Figure 1:** Rhabditiform larva of *strongyloides stercoralis* with short buccal cavity and double bulb esophagus



**Figure 2:** Cysts of *giardia intestinalis*

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## REFERENCES

1. Keiser PB, Nutman TB. *Strongyloides stercoralis* in the immunocompromised population. Clin Microbiol Rev 2004;17:208-17.
2. Dinleyici EC, Dogan N, Ucar B, Ilhan H. Strongyloidiasis associated with amebiasis and giardiasis in an immunocompetent boy presented with acute abdomen. Korean J Parasitol 2003;41:239-42.
3. Rai S, Wadhwa V, Kharbanda P, Uppal B. A case of poly-parasitism involving a trematode and four different nematodes in a migrant from Bihar. Indian J Med Microbiol 2007;25:62-3.
4. Wahlgren M. *Entamoeba coli* as cause of diarrhoea? Lancet 1991;337:675.
5. van Velthuysen ML, Florquin S. Glomerulopathy associated with parasitic infections. Clin Microbiol Rev 2000;13:55-66.

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