

## ***Hymenolepis diminuta* Infection Clinically Presented as Acute Appendicitis: A Case Report**

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*Hymenolepis diminuta* is a cestode infection of rodents. Human infection is uncommon with low parasitisation rates varying from 0.001 % and 5.5%. Less than 500 global cases have been reported up to now. Humans are infested by consumption of foods contaminated with arthropods that are infected with cysticercoid larvae. Children of low socioeconomic status and poor hygiene were the affected group in most reported cases. A 20-year-old male from an urban area was presented with a history of right sided lower abdominal pain of two weeks duration. The full blood count revealed neutrophilic leukocytosis. Ultrasound scan of the abdomen showed a mass lesion in the right side of pelvis, giving a probable diagnosis of an appendicular mass. Macroscopy of the appendicular mass showed a periappendicular tan coloured firm area with purulent material. Haematoxyline and eosin stained tissue sections of the appendix showed a parasite composed of a scolex containing suckers and horizontally arranged proglottids, morphologically compatible with *Hymenolepis diminuta*/rat tapeworm, embedded within necrotic debris of the appendicular lumen. The appendix and periappendicular tissue showed mixed inflammatory infiltrate rich in eosinophils, with many suppurative granulomata. Stool examination revealed commensal organisms only. In this case, the diagnostic method was the microscopic tissue examination of *Hymenolepis diminuta* within the appendicular mass. The most of the reported cases were diagnosed by examination of concentrated stool samples for eggs and proglottids. The awareness of this rare parasitic infection in tissue sections, as in our case will aid the proper identification and early treatment.

**Keywords:** *Hymenolepis diminuta, acute appendicitis, tissue sections*