

## ***Lophomonas blattarum* infection in an immune-competent patient and its misdiagnosis: A case report**

**Ruchika Butola**

Rajiv Gandhi Super Speciality Hospital, India

**Introduction:** *Lophomonas blattarum* is a round-oval shaped protozoan, 20-60  $\mu\text{m}$  diameter with apical tuft of numerous flagellate. It resides as an endocommensal in the hindgut of insects such as cockroaches. It's increasingly being recognized as one of the cause bronchopulmonary infection.

**Case Report:** A 22-year-old female presented with complaints of cough with blood clots in expectorant, breathlessness on exertion, wheeze and low-grade fever, for past one year. Before arriving to our Outpatient Department (OPD), patient had consulted other medical centers. There she was diagnosed with tuberculosis. In our OPD she was reviewed with previous reports, advised new investigations, continued on Anti-tubercular Therapy (ATT) and was planned for bronchoscopy. The Bronchoalveolar Lavage (BAL) was sent for laboratory testing. Wet mount of the sample revealed a motile multiflagellate protozoan resembling ciliated respiratory epithelium. After further assessment, it was reported as *Lophomonas blattarum*. The patient was kept on ATT, while awaiting Mycobacterium Tuberculosis (MTb) test results. Ongoing ATT had no positive effect patient's condition. Patient was admitted and started on Anti-protozoan treatment.

**Discussion:** It is difficult to differentiate *Lophomonas blattarum* symptoms from other respiratory infections displaying similar symptoms. Laboratory diagnosis relies on identification of morphological features under light microscopy. Missed identification could be due to delayed sample processing and its close resemblance to bronchial epithelium. With development of serological and molecular methods of identification, diagnosis and treatment can improve.

### **Biography**

Ruchika Butola has completed her MD Microbiology from Swami Vivekanand University, Meerut, India. She is currently working as a Senior Resident in the Department of Clinical Microbiology of Rajiv Gandhi Super Speciality Hospital, Delhi, India.

drbutolaruchika@live.com