

## Letters to the Editor

### Community-acquired pneumonia by *Legionella pneumophila*. Do we need to include new recommendations for inflammatory bowel disease patients under immunomodulators?

---

*Key words:* Legionella pneumophila. Immunosuppressants drugs. Anti-TNF agents. Crohn's disease.

---

DOI: 10.17235/reed.2016.4213/2016

Dear Editor,

We present the case of a community-acquired pneumonia (CAP) by *Legionella pneumophila* (LP) in a patient with Crohn's disease (CD) under infliximab and corticosteroids.

#### Case report

A 31-year-old woman with CD presented with fever and dyspnea. C-reactive protein was 21.98 mg/dl, and a left basal consolidation was observed in chest X-ray. LP urine antigen test was positive and levofloxacin treatment was initiated with a good clinical response. Epidemiology Department found the source of LP in an electric heater at the patient's home.

#### Discussion

Anti-TNF agents increase the risk of infection by intracellular pathogens as *M. tuberculosis*, *L. monocytogenes*, *H. capsulatum*, *Aspergillus*, *P. jiroveci* and *L. pneumophila*. Patients treated

with anti-TNF agents have an incidence of LP infections 16.5-21 times higher than general population.

LP (gram-negative aerobic bacterium) live in surface waters, multiplying between 20-45 °C and being destroyed at 70 °C. It is an opportunistic disease, transmitted via inhalation of aerosols. The cases must be notified.

Clinical presentation include Pontiac fever (mild acute febrile syndrome) and legionellosis (atypical pneumonia with high fever and more severe symptoms). It has been recently observed that legionellosis is associated with smoking and patients under anti-TNF agents in combination with any other immunosuppressant drugs (azathioprine, corticosteroids or methotrexate). Quick recognition of legionellosis and early treatment reduce mortality and doctors using anti-TNF agents should be aware of this association.

We propose to include measures to prevent LP infection in patients starting treatment with immunosuppressant drugs as the number of these patients is increasing, with fatal consequences for some of them. These recommendations would include avoiding stagnation of water, sediment, corrosion, plastics and microbiota. Temperature of water should also be checked, getting to 70 °C weekly. If the patient is away from home, do not turn off the heater, or turn it on in time to reach the equilibrium temperature and drain the water before using.

Tania Fernández-Llamas, Antonio Sánchez-Torres  
and Juan Egea-Valenzuela

*Department of Digestive Diseases. Hospital Universitario Virgen de la Arrixaca. Murcia, Spain*

#### References

1. Hofmann A, Beaulieu Y, Bernard et al. Fulminant legionellosis in two patients treated with infliximab for Crohn's disease: case series and literature review. *Can J Gastroenterol* 2009;23:829-33.
2. Ali T, Kaitha S, Mahmood S, et al. Clinical use of anti-TNF therapy and increased risk of infections. *Drug Healthc Patient Saf* 2013;5: 79-99.

3. Beigel F, Jürgens M, Filik L, et al. Severe Legionella pneumophila pneumonia following infliximab therapy in a patient with Crohn's disease. *Inflamm Bowel Dis* 2009;15:1240-4.
4. Masatoshi H, Hiroshi K, Takeshi M, et al. A fatal case of relapsing pneumonia caused by Legionella pneumophila in a patient with rheumatoid arthritis after two injections of adalimumab. *Clin Med Insights Case Rep* 2013; 6:101-6.
5. Mercante JW, Winchell JM. Current and emerging legionella diagnostics for laboratory and outbreak investigations. *Clin Microbiol Rev* 2015;28:95-133.