Reviewer's report

Title: Acute tubulointerstitial nephritis complicating Legionnaires' Disease: a case report.

Version: 2 Date: 17 November 2011

Reviewer: paul zarogoulidis

Which of the following following best describes what type of case report this is?: Unexpected or unusual presentations of a disease

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: No

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

Minor revision

Please add the following information in the text.

Comment 1: Discussion Section

- The urine antigen test is highly specific, provides rapid results, and is particularly useful because the fact that test positivity can persist for days even during administration of antibiotic. Specificity of sputum culture is high, however, obtaining an adequate sputum specimen can be difficult. The test for serum antibodies to Legionella has a high specificity, but the lowest sensitivity. To date, clinical experience has not shown PCR to be more sensitive
than culture, and therefore the Centers for Disease Control and Prevention (CDC) does not recommend the routine use of genetic probes or PCR for the detection of Legionella in clinical samples.

Ref:

Comment 2: Discussion section

-The mechanism of renal failure associated with Legionnaires’ disease is mostly multifactorial. Histological examination of renal biopsy usually shows tubulointerstitial nephritis and/or acute tubular necrosis in patients with acute renal failure [1]. Among possible factors, those associated with dehydration or shock, rhabdomyolysis, endotoxemia and direct microbial toxicity. In one previous report, the existence of Legionella bacteria was found by electron microscopy [2]. Therefore, recent reports describing the mechanism of renal dysfunction seem to point to direct renal toxicity from the Legionella organism or a systemic manifestation of Legionnaires’ disease [2].

-In the lung, the organism is phagocytosed into respiratory epithelial cells, where it replicates and induces cellular injury [3]. It is possible that the same process occurs in renal epithelial cells, both at the tubular epithelial cells and at the glomeruli.

Ref:
Quality of written English: Acceptable

Declaration of competing interests:
I declare that I have no competing interests