Abdominal pain can be the only manifestation of Legionella pneumonia: Role of routine chest X-ray.

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Introduction:
Routine chest x-ray (CXR) has been reported to be not useful for the management of hospitalized patients. We will present a rare case, in which routine CXR lead to the correct and timely diagnosis of Legionella pneumonia manifesting with abdominal pain, lacking respiratory signs and symptoms.

Case Presentation:
A 53-year-old man, who has no past medical history presented with a 5-day history of lower abdominal pain, fever, malaise, and constipation. He denied any respiratory symptoms such as cough and dyspnea. On examination, the patient looked unwell but was not distressed, the blood pressure was normal, the pulse 103 beats per minute, the temperature 38.9°C, and there is neither tachypnea nor hypoxemia. There are no specific findings on physical exam other than the distended abdomen and lower abdominal tenderness with no crackles or wheeze on chest auscultation. Complete blood count was normal. Aspartate aminotransaminase and alanine aminotransferase, creatine phosphokinase and C-reacting protein were elevated on biochemistry tests. Abdominal computed tomography scan showed edema of the wall of the intestine. We decided to admit him with the presumptive diagnosis with infectious enteritis. However, routine chest X-ray on admission disclosed infiltrate on the left lung. Thereafter, repeated careful history taking revealed recent exposure to hot spring. Final diagnosis with Legionella pneumonia was made based on a positive urine test for its antigen.

Discussion:
Previous studies have shown that routine CXR on admission is not useful and inappropriate on a cost-benefit basis. It is reported that Legionella pneumonia sometimes lacks respiratory signs and symptoms, and pneumonia is not even suspected, where routine CXR is the only clue for the diagnosis. Routine CXR should be performed when a definitive diagnosis is not made among sick patients requiring hospitalization.