

## Organizing pneumonia as another pathological finding in pandemic influenza A (H1N1)

### Organización de la neumonía como otro hallazgo patológico en la gripe A pandémica (H1N1)

We read with great interest the well-written manuscript by Nin et al.,<sup>1</sup> who described pathological changes in the lungs in fatal cases of influenza A (H1N1) viral pneumonia. They concluded that diffuse alveolar damage was the predominant finding, accompanied by alveolar hemorrhage and, in some cases, by bronchiolitis and microthrombi. Patients who died within the first week after diagnosis presented signs of exudative acute respiratory distress syndrome (ARDS), whereas those who died after the first week presented signs of proliferative ARDS. Also, in a recent editorial, López-Alonso and Albaiceta<sup>2</sup> emphasized the presence of mechanisms of tissue repair occurring in very early stages of injury, and questioned the role of this inflammatory response in patients' recovery.

We would like to highlight another important pathological finding observed in these patients: organizing pneumonia (OP). A recent study examining the correlation between computed tomographic (CT) features and pathological findings in fatal cases of H1N1 pneumonia described a patient who presented linear opacities on a follow-up CT scan performed 15 days after the first examination. The patient died 28 days after the first hospitalization, and histological examination showed typical elongated fibroblast plugs filling airspaces, compatible with OP.<sup>2</sup> Other studies have also reported similar findings.<sup>3,4</sup>

Pulmonary fibrosis observed in the recovery phase may, at least in part, account for the respiratory symptoms observed in these patients. CT may play a role in the detection and characterization of the disease, in monitoring the disease progress and response to treatment, and in the identification of complications. Although pulmonary opacities secondary

to H1N1 infection usually regress during convalescence, consolidations may occasionally progress to linear or peripheral opacities. Histopathological studies have shown that, in most cases, these later changes are due to secondary OP.<sup>2-4</sup>

In conclusion, pulmonary opacities observed in the recovery phase of H1N1 infection frequently represent OP. The diagnosis of secondary OP after H1N1 infection is important because proper treatment of OP requires corticosteroid therapy. Physicians should be aware that OP may complicate the recovery of patients with H1N1 infection, and the development of late opacities on CT scans during recovery should suggest this diagnosis.<sup>3-5</sup>

### Bibliografía

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<http://dx.doi.org/10.1016/j.medin.2012.08.002>