Acute respiratory distress in a patient using non-invasive ventilation

**CLINICAL PRESENTATION**
A 49-year-old man with advanced motor neurone disease was admitted for initiation of non-invasive ventilation (NIV) for established daytime hypercapnia and symptoms of nocturnal hypoventilation. It had also been noted that when sleeping he was snoring heavily. He had initially tolerated NIV well during the day, but during his second night he was noted to be in respiratory distress with worsening arterial blood gases. He refused to use his ventilator any further. Communication was extremely limited due to severe bulbar symptoms, but the patient indicated facial discomfort. The chest radiograph was normal and a lateral facial radiograph is shown in fig 1.

**QUESTION**
What is the abnormality and the likely explanation for it?

See page 844.

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**Intersitial lung disease**

Classification of the idiopathic interstitial pneumonias. This joint statement of the American Thoracic Society (ATS), and the European Respiratory Society (ERS) was adopted by the ATS board of directors, June 2001 and by the ERS Executive Committee, June 2001. Am J Respir Crit Care Med 2002;165:277–304.


