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Neuroendocrine cell hyperplasia of infancy (NEHI)

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NEHI is a newly described diffuse lung disease of children. Children with NEHI usually present before the age of 2 years with tachypnea, hypoxia, and retractions [1]. Auscultation can be normal or reveal scattered crackles without wheezing. The clinical course is usually prolonged, with slow improvement. There have been no deaths reported [1].

On chest radiographs nonspecific findings often suggest viral airway disease. High-resolution CT findings are distinctive with geographic ground-glass opacity centrally and in the right middle lobe and lingula, with diffuse air trapping (Fig. 1) [2]. No other airway or parenchymal abnormalities are seen.

Diagnosis is made by bombesin immunostaining, which reveals increased neuroendocrine cells on lung biopsy. Biopsies are usually otherwise nonspecific and only mildly abnormal. It is important to suggest this diagnosis so that bombesin staining can be performed. Steroids have not been effective, and complications of steroids can be avoided. The correct diagnosis provides welcome prognostic information for the family.

References

1. Deterding RR, Pye C, Fan LL, et al (2005) Persistent tachypnea of infancy is associated with neuroendocrine cell hyperplasia. *Pediatr Pulmonol* 40:157–165
2. Kuhn JP, Brody AS (2002) High-resolution CT of pediatric lung disease. *Radiol Clin North Am* 40:89–110

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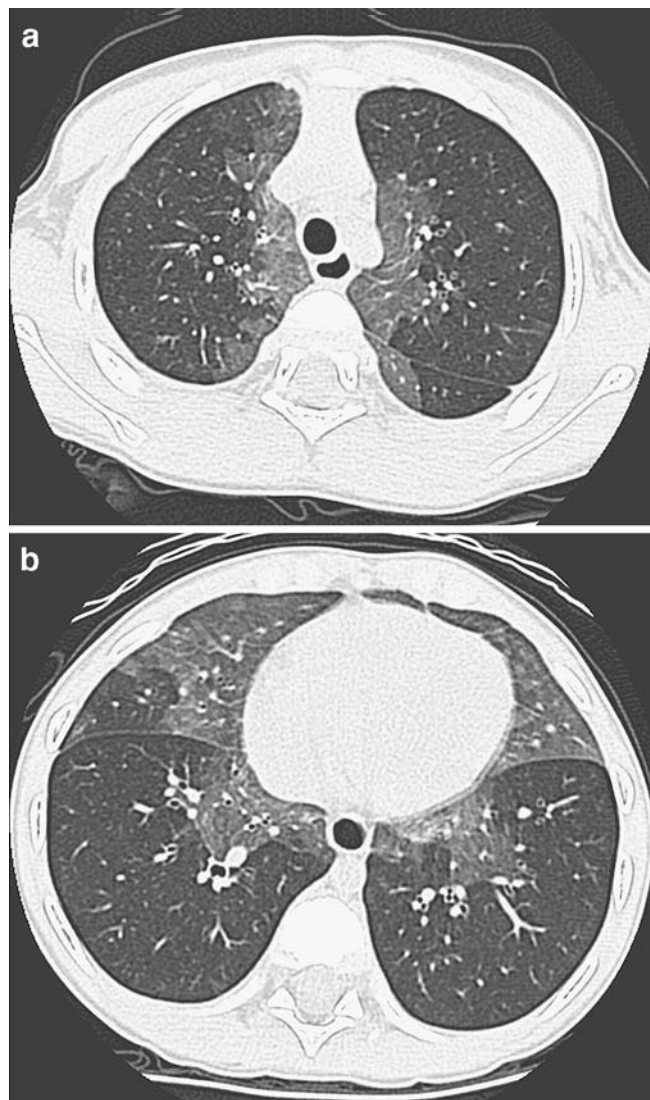


Fig. 1 High-resolution CT images