

Cumbo sign

Karan Madan, Randeep Guleria

Department of Pulmonary
Medicine and Sleep Disorders,
All India Institute of Medical
Sciences, New Delhi, India

Correspondence to

Dr Karan Madan,
drkaranmadan@gmail.com

DESCRIPTION

A 31-year-old male patient presented with a history of cough and blood streaked sputum of 2 weeks duration. There was a history of sudden onset of expectoration of copious amounts of salty sputum, at the time of symptom onset. There was no fever, weight loss, wheezing, chest pain or shortness of breath. There was a history of close contact with dogs. On examination of the respiratory system, bronchial breath sounds were heard in the left infrascapular area. Rest of the systemic examination was unremarkable.

A chest radiograph (figure 1) demonstrated a large cavitory lesion in the left lower zone with internal membrane-like structure containing air that was capped by an air crescent—the ‘cumbo sign’. CT of the thorax (figure 2) confirmed the presence of the ‘cumbo sign’, wherein air/fluid level was seen in the endocyst capped by a crescent of air between the endocyst and the pericyst. Hydatid serology was positive. A diagnosis of ruptured pulmonary hydatid cyst was confirmed. The patient was initiated on treatment with albendazole and also improved.

Hydatid disease is caused by the cestode worm, *Echinococcus*. Humans are accidental hosts in the life cycle who contract the disease by ingesting the parasite eggs.¹ Dogs are the definitive parasite



Figure 1 Posteroanterior chest radiograph demonstrating a large cavitory lesion in the left lower zone with internal air containing membranous structure capped by an air crescent—the ‘cumbo sign’.

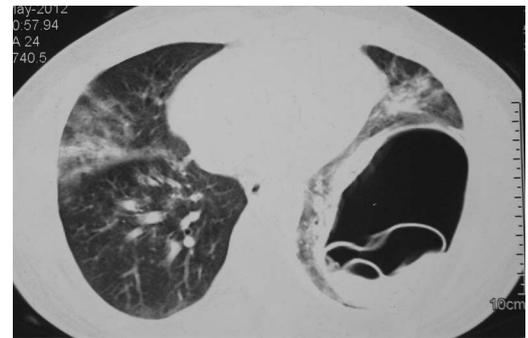


Figure 2 CT of the thorax delineating the internal membrane-like structures of the ruptured pulmonary hydatid cyst wherein the air containing endocyst is capped by air between it and the pericyst.

hosts. Rupture is often accompanied by expectoration of copious amount of salty expectoration as in our patient. Radiological appearance of ruptured pulmonary hydatid cyst can often mimic non-resolving pneumonia and lung mass.² Cumbo sign also known as the onion peel sign or double arch sign is pathognomonic for ruptured pulmonary hydatid cyst.

Learning points

- ▶ Radiological findings in ruptured pulmonary hydatid cyst can frequently be non-specific.
- ▶ Cumbo sign is a pathognomonic radiological sign for ruptured pulmonary echinococcal cyst.
- ▶ Recognition of this classical radiological sign can obviate the need for many unnecessary diagnostic investigations.

Contributors KM and RG contributed in the management of the patient and manuscript preparation.

Competing interests None.

Patient consent Obtained.

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