Let sleeping dogs lie: a surprising chest X-ray in the paediatric emergency department

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DESCRIPTION

A 7-year-old Bulgarian boy, who had lived in the UK for 18 months, presented with 1 week of cough, fever, intermittent pleuritic pain and 2 months of weight loss. He had a recent trip to Bulgaria, did not own any pets and had not visited any farms. Examination and blood investigations were unremarkable, except for fever. His chest X-ray (figure 1) and CT scan (figure 2) revealed two large opacities. Although there was a wide differential list, hydatid cysts were strongly suspected given the clinical context, and because the masses were smooth walled and homogeneous, despite the echinococcus serology being negative on two occasions. He underwent bilateral cyst excision and the diagnosis was confirmed. He received praziquantel for a fortnight preoperatively and postoperatively and thereafter a 1-year course of albendazole.

The incidence of Echinococcus granulosus is increasing in Europe.1 The tapeworm eggs are defaecated by the definitive canine host and are ubiquitous, so easily ingested by children. Cysts develop at a rate of 1–5 cm per year. The liver and lungs are the most common sites but others include the spleen, central nervous system, bone and kidneys.2

Cysts are often found coincidentally on radiological examinations. Symptoms, when they occur, relate to pressure effects but cyst rupture can lead to fatal anaphylaxis. Serology can help but lacks sensitivity.3

Learning points

▸ Paediatricians need to be aware of hydatid disease given the increasing incidence.
▸ Serological tests may be negative.
▸ Early specialist referral is essential given the potential complications.

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REFERENCES
