

A chest wall swelling in a young girl

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TO THE EDITOR: Humans may serve as intermediate hosts in hydatid disease, a parasitic infection caused by the tapeworm *Echinococcus granulosus*. They are infected through contact with infected dogs or by ingestion of tapeworm eggs in contaminated food, water, or soil.¹ The larvae form cysts in body organs. Although the liver is the most common site, lung cysts are seen in up to 30% of cases of hydatid disease. Lung cysts are generally asymptomatic, but symptoms occur if the cysts rupture.² Here, we describe an adolescent girl with a lung cyst that ruptured across the thoracic cage into the subcutaneous fascia, presenting as a breast swelling.

A 14-year-old girl had had left-sided pleuritic chest pain, a high-grade fever, and marked swelling of the left breast for 10 days, which did not respond to antibiotics (oral amoxicillin and parenteral amikacin). Clinical examination revealed a slender, febrile and tachypnoeic patient with a tender swelling of the left mammary region. The swelling had a tense cystic feel, and transmitted impulses were felt when she coughed. A diffuse pleural rub was heard anteriorly, with reduced air entry.

Investigations revealed a neutrophilic leukocytosis of $12.7 \times 10^9/L$. Chest x-ray showed diffuse opacification of the left hemithorax, and a computed tomography scan revealed a cystic, low-attenuation lesion in the left hemithorax extending into the submammary region (Figure A). On anterolateral thoracotomy, an infected ruptured cyst was seen in the left upper lobe of the lung, with degenerated membranes and pus extending across the chest wall into the submammary space. The cyst was removed, capitonnage of the residual

cavity was performed, and pus and laminated membranes were removed from the submammary space. Small communications seen between the pus cavity and the bronchi were closed. After the operation, parenteral antibiotics (vancomycin and amikacin) were administered for 10 days and albendazole for 4 weeks. Casoni's skin test was positive and antihydatid antibodies were detected in serum. Surgically obtained pus revealed non-viable scolices of *E. granulosus* (many degenerated), and the histopathology of the surgical specimen was consistent with hydatid membrane (Figure B).

Pulmonary hydatid cysts can rupture; however, rupture into the pleural cavity is rare.¹⁻³ Although spontaneous rupture of a cyst into the pleural cavity, or rupture after trauma, has been reported,^{4,5} a rupture across the pleural cavity into the submammary fascial tissues has, to our knowledge, not been reported previously.

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Convulsions associated with an overdose of St John's wort

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TO THE EDITOR: St John's wort (SJW) (*Hypericum perforatum*) is a natural medicine commonly used for treating depression. We recently encountered a case of an overdose of SJW leading to serious manifestations in the patient.

A 16-year-old girl presented to the emergency department with seizures and confusion. She was intubated and admitted to the intensive care unit. The only relevant history was of febrile convulsions at the age of 4 years. There had been no head trauma.

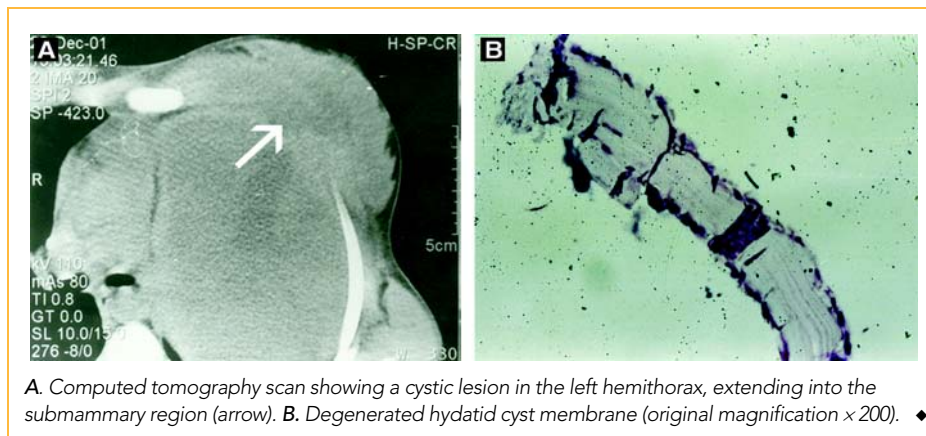
Results of a computed tomography brain scan and cerebrospinal fluid examination were unremarkable. Electrolyte levels were normal, and standard drug toxicological screens were negative. An electroencephalogram (EEG) confirmed diffuse spike wave activity consistent with generalised epileptic activity.

On further questioning, it was found that she had taken large quantities of SJW — up to fifteen 300 µg tablets a day in the 2 weeks leading up to admission and an additional 50 tablets just before presentation — for a recent “depressive episode”. Depression had not been formally diagnosed, and the tablets had been obtained “over the counter” from a local pharmacy.

A provisional diagnosis of seizures due to an overdose of SJW was made. High performance liquid chromatography was not performed to quantify hypericarin extract in serum and urine, as these tests are not available in our hospital. A repeat EEG at discharge on Day 6 was normal, and there were no further seizures in the following 6 months. Psychiatric assessment during the patient's hospital stay revealed a likely suicide attempt following recent social stresses.

There is some evidence for the efficacy of SJW in treating depression.¹ In the United States and Australia it is available without prescription, but in Germany, where it is prescribed more frequently than fluoxetine for depression, it is available by prescription only.

The reported incidence of adverse drug reactions to SJW is 0–5.7%.² Although these are usually minor and transient, more serious adverse reactions (such as serotonin syndrome) have been reported.³ SJW was implicated as a likely, but unproven, cause of seizure-related events in a recent review,⁴



A. Computed tomography scan showing a cystic lesion in the left hemithorax, extending into the submammary region (arrow). B. Degenerated hydatid cyst membrane (original magnification $\times 200$). ♦