A 58-year-old Bangladeshi man with a background of type 2 diabetes presented with a 1-month history of progressive breathlessness. Chest radiography showed a right-sided pleural effusion. Pleural fluid aspiration revealed straw coloured fluid, consisting of a lymphocytic exudate of pH 7.11. A 20F Argyle chest tube was inserted in the mid-axillary line (Figure 1). One litre of fluid was drained and the chest tube was removed after 2 days after no further drainage. Standard anti-tuberculous therapy was empirically begun and subsequent pleural fluid culture was positive for sensitive *Mycobacterium tuberculosis*. The test for infection with the human immunodeficiency virus was negative. Five months later, the patient was noted to have a cold abscess at the site of previous drain insertion, despite drug concordance on the basis of urinary assays. MRI of the thorax demonstrated a thick-walled loculated pleural effusion with a fistulous connection to the cold abscess (Figure 2). The patient underwent surgical incision and drainage of the abscess and VATS drainage of the pleural collection.

**Figure 1.** Serial chest radiographs (A) at initial presentation (B) at chest drain insertion and (C) at 5-month follow-up.

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The anti-tuberculous regime was continued and his condition improved.

Pleuro-cutaneous fistula is a rare complication of tuberculous pleural effusion. It may spontaneously occur from the extension of pleural fluid contents into the chest wall. However, in this case, the process was facilitated by the tract left from the insertion of an Argyle chest tube, which requires blunt dissection from the skin to the pleural surface. Corticosteroids have been proposed as an adjunctive treatment for patients with tuberculous pleural effusion and may reduce the incidence of fistula formation in patients with tuberculosis. However, although the necessity for drainage of pleural effusions with pH <7.2 is clear, the additional benefit of corticosteroids in patients with tuberculous pleural effusions remains to be established. Prompt surgery and anti-tuberculous therapy are the mainstay for the management of pleuro-cutaneous fistula complicating a tuberculous effusion.

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**Reference**