LETTER TO EDITOR
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PLEURAL THICKENING FOLLOWING ADALIMUMAB THERAPY- AN UNUSUAL MANIFESTATION

Pediatrics

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KEYWORDS

Dear editor,
Biologics are increasingly being used in management of various rheumatological disorders. Infection is one of the serious adverse effects and with increasing usage of these agents, reports of other adverse effects are also emerging (1). We present a case, who had an unusual, and probably infective, manifestation after use of a biologic agent.

An 11-year-old boy with symptomatic anterior uveitis of undetermined etiology was started on topical betamethasone, oral prednisolone (40 mg/day) and inj methotrexate (15 mg/m^2/day). However, as there was no significant improvement, injection adalimumab (40mg subcutaneously) every 2 weeks was initiated after ruling out tuberculosis, hepatitis B and hepatitis C infection. He responded well to the above treatment.

Two months later, he presented with dull aching pain over the left lower chest, fever, cough and severe respiratory distress. Chest X ray showed an inhomogeneous opacity in right lower zone suggestive of pneumonia. High Resolution Computed Tomography (HRCT) of chest revealed multiple nodules in right lower lobe with nodular pleural thickening (Figure 1). This was presumed to be infective process and relevant investigations (blood counts, blood culture, sputum microscopy and culture, Tuberculin test, serology for toxoplasma, Lyme, angiotencin converting enzyme (ACE) levels, CT guided fine needle aspiration cytology (FNAC) of the pleura) were carried out. However, the work-up was inconclusive. Adalimumab therapy was stopped and he was initiated on ceftriaxone, cloxacillin and amphotericin B. He showed gradual improvement. After 3 weeks of therapy, on discharge, he had normal chest X-ray and USG chest revealed significantly decreased pleural thickening. At 1 year of follow-up is doing well.

Pulmonary nodules with nodular pleural thickening can be a manifestation of fungal infection, bacterial pneumonia, tuberculosis, pleural metastasis, mesothelioma, asbestosis, lymphoma and sarcoidosis (2-4). While we were unable to document an infection, the time course of events suggests that this was probably an infective process. Pleural thickening following use of adalimumab has never been described before. All clinicians using adalimumab should be aware of this manifestation.

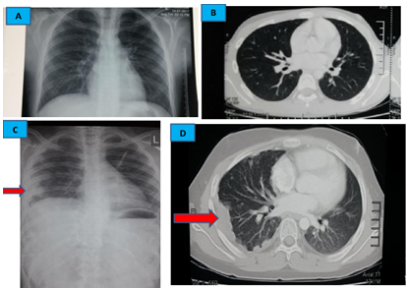

Figure 1. A, Normal chest X-ray of the child before starting adalimumab; B, normal chest CT scan before starting adalimumab; C, chest X-ray after starting adalimumab, showing (arrow) inhomogeneous opacity peripherally in right mid and upper zone; C, chest CT scan after starting adalimumab, showing (arrow) nodular pleural thickening.

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