LETTER TO THE EDITOR

Pediatric pulmonary Crohn’s disease: More frequent than expected

Dear Sir,

We read with interest the report by Vadlamudi et al. on pulmonary manifestations of Crohn’s disease in children, retrieving in the English literature 17 pediatric cases. Lung involvement in IBD is considered a rare extraintestinal complication, but the true prevalence seems to be much higher than expected. The pathophysiology is unclear and the lung involvement can be silent or with typical respiratory symptoms such as cough, fever and shortness of breath. Pulmonary complications however may also be due to therapy (sulphasalazine, mesalazine, and methotrexate) or to infections due to immunosuppressive therapy, thus, careful evaluation of the patient is mandatory. We present an additional pediatric case with bilateral nodular lung involvement which developed independently from gastrointestinal symptoms.

A 14-year-old girl with CD diagnosed at 10 years of age, was admitted to our hospital because of persistence of chronic-intermittent fever for 3 months associated with non-productive cough, dyspnea, wheezing and chest pain but without gastrointestinal symptoms. She had undergone ileo-cecal resection for symptomatic stenosis at diagnosis of disease. Over the following years, she had been treated with several therapeutic regimens including mesalazine, corticosteroids, 6-mercaptopurine, methotrexate and biologics (both, infliximab and adalimumab) most of them withdrawn because of no or limited efficacy, or due to side effects. On admission, chest examination and radiograph did not show significant alterations. Her blood count revealed WBC 18.510^6/mm^3 with neutrophil preponderance. Sedimentation rate and CRP were increased, and diagnostic work-up including DNA antibodies, antinuclear antibodies, HLAB27, C3, C4, immunoglobulins, lymphocyte markers, uric acid, lactate dehydrogenase, serology panel for Herpes simplex virus, Epstein–Barr virus and cytomegalovirus, mycoplasma titers, purified protein derivative and Quantiferon were negative. In the same period while on various antibiotic therapies recurrent aphthosis and sore throat developed. A computed tomography (CT) scan of the chest showed multiple pulmonary nodules with parenchymal infiltrates and diffuse bilateral interstitial inflammation (Fig. 1). She underwent bronchoscopy with bronchoalveolar lavage (BAL) that was negative for bacteria, virus, fungi and mycobacteria. Histology of a nodule obtained by a mini-invasive thoracotomic approach with excision of a nodule showed the presence of non-caseating granulomatous inflammation with multinucleated giant cells (Fig. 2). Angiotensin converting enzyme levels were normal. She was started on oral steroids for 3 months with significant improvement of the respiratory symptoms. Control CT-scan obtained after 2 months after revealed almost complete resolution of the pulmonary changes. She remained symptoms free during close follow-up for 12 months and CD was in remission on maintenance therapy with high dose mesalazine.

Conflict of interest

No conflict of interest to declare for any authors.

References


Figure 1 CT scan with multiple parenchymal nodules of varying sizes in both lung fields (with indication of dimensions) and interstitial inflammation (arrows).

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