An unusual cause of right sided hip pain in a patient with ulcerative colitis: Iliopsoas muscle atrophy

Dear Sir,

Ulcerative colitis (UC) is an inflammatory bowel disease (IBD) of uncertain etiology that is characterized by recurring episodes of inflammation primarily involving the mucosal layer and occasionally the submucosa of the colon. Joint manifestations are the most common extraintestinal manifestation (EIM) in IBD and occur in approximately 20%–30% of patients.1 Herein we report an unusual cause of right sided hip pain due to iliopsoas muscle atrophy in a patient with UC.

A 38-year-old man was admitted to our outpatient service with complaints of diarrhea occurring six to seven times per day for three years and rectal bleeding for six months. He had also complained of right sided hip pain, which is not responding to NSAID, for two years. His history revealed no use of antibiotics, travel or suspected food consumption. His birth and early development were normal. Laboratory findings were as follows: serum hemoglobin 10.4 g/dl, white cell count 6500/mm³, platelet count 458,000/mm³, ESR: 92 mm/h and CRP: 2.91 mg/dl. Biochemical tests were within normal limits. Measurement of celiac-specific antibodies (antibodies to gliadin and endomysium) were all negative. Colonoscopy showed diffuse hyperemic mucosa and ulcerations in the rectum and sigmoid colon. Histopathological findings of the biopsy specimens were compatible with UC. Mesalamine 4 g/day was initiated and after starting the therapy with mesalamine, his symptoms besides right sided hip pain resolved. Dual energy X-ray absorptiometry and X-ray examinations included an AP pelvis, AP and lateral views of right hip were normal. In order to further explore the hip pain computerized tomography (CT) was performed. In axial CT imaging, iliacus, psoas major, gluteus medius, gluteus minimus, piriformis and obturator internus muscles were atrophic in the right side of the body. Gluteus maximus muscle was atrophic superiorly, but available inferiorly.

Musculoskeletal manifestations are the most common extra-intestinal complication of IBD.2 In patients with IBD rheumatological findings should be evaluated carefully in order to provide an accurate and early diagnosis, and to establish an adequate therapy. Spondylitis occurs in 1 to 26% of patients with IBD3,4 and arthritis of the hips can be seen in ankylosing spondylitis. Hip pain may not originate in the hip itself but may be caused by systemic inflammation. Pain around the hip is common in patients with osteoarthritis (OA). It may be due to OA of the hip. In addition muscle atrophy has been demonstrated in patients suffering from osteoarthritis of the hip4 and reviewing the literature LaBan et al. have reported a patient with right iliopsoas muscle atrophy due to OA of the ipsilateral hip.5

In the present case, initially right sided hip pain was thought to be a component of extra-intestinal complication of IBD. Arthropathy including sacroiliitis, spondylitis and OA, was excluded according to laboratory and imaging studies and ipsilateral iliopsoas muscle atrophy was diagnosed. Muscular atrophy is the wasting or loss of muscle tissue resulting either from disease or lack of use (disuse atrophy) and it can be drug-induced from abuse of alcohol or opiates or from prolonged use of steroids. In the general population, most muscular atrophy results from disuse. Disuse atrophy can be caused by immobility, such as an arm being in a cast for a long period of time. It can also occur to some degree if a person stops performing their usual activities, such as walking. In our case during the last three years his normal daily activities had been restricted due to symptoms of UC. For this reason, we suggested that restriction of physical activity leads to iliopsoas muscle atrophy.

In conclusion iliopsoas muscle atrophy should be kept in mind in the differential diagnosis of extra-intestinal manifestations of IBD and physical activity status of the patients should be questioned.
References


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Figure 1  (A) Left psoas major (arrow), (B) left iliacus (small white arrow), left gluteus medius (long white arrow), left gluteus maximus (black arrow) (C) right and left gluteus maximus (black arrows), piriformis (long white arrow), and (D) left obturator internus (white arrow) muscles were shown.