

# BALANCING REHABILITATION AND AUTOIMMUNITY: ULCERATIVE COLITIS EXACERBATION LINKED TO NSAID USE IN PHYSIOTHERAPY

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## Background

Ulcerative colitis (UC) is an inflammatory bowel disease often triggered by environmental or pharmacologic factors. Although (NSAID) are commonly used in physiotherapy for musculoskeletal pain, their safety in UC remains debated. We present a case of a patient in long-term UC remission who experienced a severe flare following NSAID use during physiotherapy. This case raises important considerations about the potential role of NSAID in triggering autoimmune responses and the need for caution when prescribing them to patients with underlying inflammatory conditions.

## Case report

23-year-old man, engineer, with personal history of UC and ankylosing spondylitis in remission for 4 years, medicated with 2g mesalazine/day. He performed frequent muscular resistance training. He had terrible fracture of the left elbow whilst skateboarding (elbow dislocation, radial head and coronoid fracture). After 1 month of conservative treatment (which included iontophoresis with NSAID-Ketoprofen), his past symptoms of ankylosing spondylitis and UC returned. Colonoscopy revealed pan-ulcerative-colitis. NSAID were stopped and he started treatment with messalazine enema, 40mg prednisolone/day (followed by slow weaning) and azathioprine, which was initially effective. However, symptoms relapsed when prednisolone dose was lowered below 20mg/day, and the patient had to start anti-TNF (infliximab), becoming completely asymptomatic. One year after the fracture, with physiotherapy and gradual return to resistance training, there was complete recovery of arm pain, ROM and muscle atrophy/strength.

## Conclusion

This case highlights the potential risk of UC exacerbation associated with NSAID use, even in patients in stable remission, and despite NSAID being used in iontophoresis, not orally/systemically. Clinicians should weight the benefits of symptom relief with NSAIDs against the risk of triggering disease flares in individuals with autoimmune diseases. This case also highlights the possibility of achieving excellent results in Terrible Triad of the Elbow with conservative treatment, especially in young physically patients, motivated to comply with a rehabilitation and muscle strengthening plan.

**Keywords:** Ulcerative Colitis NSAID Terrible Triad