ABSTRACT

Hip pathology is common amongst athletes and the general population. The mechanics of cycling have the potential to exacerbate symptomatic hip pathology and progress articular pathology in patients with morphologic risk factors such as femoroacetabular impingement. A professional fit of the bicycle to the individual which aims to optimize hip joint function can allow patients with hip pathology to exercise in comfort when alternative high impact exercise such as running may not be possible. Conversely improper fit of the bicycle can lead to hip symptoms in otherwise healthy individuals who present with risk factors for hip pain. Accordingly a bike fit can form part of the overall management strategy in a cyclist with hip symptoms. The purpose of this clinical commentary is to discuss hip pathomechanics with respect to cycling, bicycle fitting methodology and the options available to a physical therapist to optimize hip mechanics during the pedaling action.

Key Words: bicycling, femoroacetabular impingement syndrome, hip, movement system, myofascial trigger points, osteoarthritis.