

Abstract

Introduction: Ischiofemoral impingement (IFI) is a relatively recently described subunit of the group of so-called posterior hip pain disorders. However, the buttock pain most commonly associated with IFI is a very non-specific symptom. Therefore, it is very important to pay attention to differential diagnosis, which is the key to setting the optimal therapeutic plan. Therefore, the aim of this thesis is to summarize the available information on this diagnosis, focusing in particular on the clinical diagnosis and typical findings on imaging.

Methodology: The practical part of the thesis consists of a retrospective analysis of 38 magnetic resonance images of the hip region. From these images, in cooperation with the Department of Imaging Methods 2nd Faculty of Medicine and Motol University Hospital, the data necessary for the diagnosis of IFI were read: ischiofemoral space (IFS), quadratus femoris space (QFS) and the presence of signal changes of m. quadratus femoris (QFM). The correlation between the dimensions of IFS, QFS and the presence of signal changes of QFM in the examined set of images was assessed. Furthermore, the influence of gender on these dimensions (IFS, QFS) was evaluated. In conclusion, a case report of a patient with IFI including a proposal for physiotherapeutic intervention is presented.

Results: According to our analysis, there is a statistically significant ($p < 0,05$) correlation between the size of IFS and the presence of QFM signal changes in the presented set of images. Women in the presented set show statistically significantly smaller IFS and QFS sizes compared to men.

Conclusion: FS and QFS dimensions are dynamic measures and many factors can influence their size. According to the analysis performed in the present cohort, when the IFS dimension decreases, the chances of QFM signal changes are increased. In the literature, IFI is more frequently described in women, and the results of this research also correspond to this. The dimensions of IFS and QFS are statistically significantly dependent on gender in the study population.

Discussion: Findings on imaging are crucial for the diagnosis of IFI. However, clinical findings are equally important and were not considered in our research. Future research on this syndrome including clinical findings and therapeutic interventions would be useful.