

The Prevalence of Abdominal Hernias in Patients with Symptomatic Femoroacetabular Impingement

Thomas H. Wuerz, MD, MSc, USA
Francesco Dalla Riva, MD, SWITZERLAND
Florian Dominik Naal, SWITZERLAND
Beat Dubs, MD, SWITZERLAND
Shane Nho, MD, USA
Michael Leunig, MD, SWITZERLAND

Schulthess Klinik
Zurich, SWITZERLAND

Summary:

With a prevalence of almost 40%, abdominal hernias seem to appear frequently concurrently with FAI.

Abstract:

INTRODUCTION

Various pathologies can induce groin pain, so the diagnosis of symptomatic femoroacetabular impingement (FAI) can be challenging. One differential diagnosis is abdominal hernia. To our knowledge, there is no report about the prevalence of abdominal hernias in FAI patients. The purpose of this study was to evaluate the prevalence of abdominal hernias (femoral and inguinal) in patients with symptomatic FAI.

METHODS

The cohort comprised a consecutive series of 79 patients (87 hips) with clinical symptoms and radiographic evidence of FAI. There were 37 females and 42 males. The mean age was 29.5 years (range, 12-64 years). All patients underwent an ultrasound evaluation of the involved groin. Diagnostic injections of the symptomatic hip joints were also performed. Basic demographics were collected and radiographic parameters were analysed.

RESULTS

Sonographic evidence of abdominal hernias was found in 34 (39%) of the hips. There were seven femoral and 24 inguinal hernias, in three cases they occurred concurrently. Six of the patients with hernias reported either no or only minimal improvement upon diagnostic intra-articular injection. Two of these patients had signs of insertional tendinopathy at the os pubis, and four underwent surgical repair of their hernia. There were no statistically significant differences regarding age, center-edge angle, acetabular version, femoral neck-shaft angle, and alpha angle.

DISCUSSION & CONCLUSION

With a prevalence of almost 40%, abdominal hernias seem to appear frequently concurrently with FAI. Diagnostic intra-articular injections could differentiate between the source of pain, highlighting that in most cases the observed hernias were not responsible for patients' symptoms. In patients who do not respond to an intra-articular injection, ultrasound of the groin may be an important diagnostic tool to identify abdominal hernias as source of groin pain similar to FAI symptoms. Further studies are needed to develop standardized evaluation of the groin and to assess its cost-effectiveness. Patients with positive findings for abdominal hernia may require referral to a general surgeon for further treatment.