

CORRELATION BETWEEN PATIENT ACTIVITY LEVELS AND CHONDRAL LESIONS IN THE KNEE

Ancuța ZAZGYVA¹
Sándor-György ZUH²
Örs NAGY³
Octav RUSSU⁴
István GERGELY⁵
Tudor Sorin POP⁶

AIM: TO DETERMINE THE WAY A PATIENT'S ACTIVITY LEVEL INFLUENCES THE CHARACTERISTICS OF CHONDRAL LESIONS OBSERVED DURING KNEE ARTHROSCOPY.

MATERIAL AND METHOD: THE STUDY IS BASED ON THE RETROSPECTIVE ANALYSIS OF 420 PATIENTS WHO UNDERWENT ARTHROSCOPIC INTERVENTIONS ON THE KNEE DURING JANUARY 2011 AND DECEMBER 2013. WE USED DATA OBTAINED FROM THE PATIENT RECORDS AND INFORMATION ABOUT THE OBSERVED CARTILAGE LESIONS OF THE KNEE FROM THE SURGICAL PROTOCOLS, WHICH WE SUBSEQUENTLY CORRELATED WITH THE ACTIVITY LEVEL OF PATIENTS BASED ON THEIR ESTIMATES USING THE TEGNER ACTIVITY SCALE.

RESULTS: THE MEAN AGE OF PATIENTS WAS 32.6 YEARS (16 TO 53 YEARS), 269 PATIENTS WERE MALE (64.04%) AND 151 FEMALE (35.96%). THE ACTIVITY LEVEL ACCORDING TO THE TEGNER SCALE RANGED FROM 0-1 IN 10.96% OF PATIENTS, FROM 2 TO 4 IN 21.90%, FROM 5 TO 7 IN 42.86% AND FROM 8 TO 10 IN 24.28% OF THE PATIENTS. MILD OR MODERATE CARTILAGE LESIONS WERE PRESENT IN MOST CASES: ICRS I IN 82.14% AND ICRS II IN 60.47% OF PATIENTS. ICR III LESIONS WERE PRESENT IN 27.14% OF CASES, WHILE ICRS IV LESIONS WERE FOUND IN 15.23% OF CASES. SINGLE FOCAL LESIONS WERE RECORDED IN 25.95% OF THE

¹ Clinic of Orthopaedics and Traumatology Târgu Mureș, Department of Orthopaedics and Traumatology – University of Medicine and Pharmacy Târgu Mureș

² Clinic of Orthopaedics and Traumatology Târgu Mureș, Department of Orthopaedics and Traumatology – University of Medicine and Pharmacy Târgu Mureș

³ Clinic of Orthopaedics and Traumatology Târgu Mureș, Department of Orthopaedics and Traumatology – University of Medicine and Pharmacy Târgu Mureș

⁴ Clinic of Orthopaedics and Traumatology Târgu Mureș, Department of Orthopaedics and Traumatology – University of Medicine and Pharmacy Târgu Mureș

⁵ Clinic of Orthopaedics and Traumatology Târgu Mureș, Department of Orthopaedics and Traumatology – University of Medicine and Pharmacy Târgu Mureș

⁶ Clinic of Orthopaedics and Traumatology Târgu Mureș, Department of Orthopaedics and Traumatology – University of Medicine and Pharmacy Târgu Mureș

PATIENTS AND MULTIPLE AND/ OR EXTENDED LESIONS WERE OBSERVED IN 63.09% OF THE TOTAL CASES. WE FOUND A STRONG POSITIVE CORRELATION BETWEEN PATIENT ACTIVITY LEVEL AND THE NUMBER AND EXTENT OF CARTILAGE LESIONS ($R = 0.77$ AND $R = 0.81$, $P < 0.01$), WITH A MODERATE CORRELATION BETWEEN ACTIVITY LEVEL AND THE SEVERITY OF CHONDRAL LESIONS.

***CONCLUSIONS:** CARTILAGE LESIONS ARE PRESENT IN THE VAST MAJORITY OF PATIENTS IN WHOM KNEE ARTHROSCOPY IS PERFORMED. HIGH ACTIVITY LEVELS PREDISPOSE PATIENTS TO MORE NUMEROUS AND EXTENSIVE CARTILAGE LESIONS OF THE KNEE.*

KEYWORDS: ACTIVITY LEVEL, CHONDRAL INJURIES, KNEE ARTHROSCOPY