

**HUBUNGAN ANTARA KARAKTERISRIK PASIEN  
OSTEOARTRITIS DENGAN DERAJAT OSTEOARTRITIS  
BERDASARKAN GAMBARAN USG TULANG  
RAWAN SENDI LUTUT**

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**Abstrak**

Usia, jenis kelamin, indeks massa tubuh dan kadar asam urat adalah faktor resiko yang berpengaruh terhadap derajat keparahan osteoartritis. Tujuan dari penelitian ini adalah untuk mengetahui hubungan antara karakteristik pasien OA dengan derajat OA berdasarkan gambaran USG tulang rawan sendi lutut. Usia, jenis kelamin, indeks massa tubuh, dan kadar asam urat dinilai menggunakan data rekam medis, sedangkan derajat OA didiagnosis dengan pemeriksaan USG. Penelitian ini merupakan jenis penelitian deskriptif analitik dengan pendekatan potong lintang dengan jumlah sampel 40 pasien yang diambil dengan teknik *Total Sampling* di RSUD Al-Fauzan tahun 2017-2018. Hasil menunjukkan bahwa terdapat hubungan antara indeks massa tubuh ( $p=0,004$ ) dan kadar asam urat ( $p=0,027$ ) dengan derajat OA, serta tidak terdapat hubungan antara usia ( $p=0,127$ ) dan jenis kelamin ( $p=0,655$ ) dengan derajat OA. Indeks massa tubuh merupakan faktor resiko paling berpengaruh ( $OR = 6,831$ ) terhadap derajat keparahan OA berdasarkan gambaran USG tulang rawan sendi lutut. Pasien OA dengan tubuh gemuk memiliki risiko derajat OA berat (*OA severe*) dibandingkan pasien OA bertubuh kurus dan normal. Berdasarkan analisis multivariat, keparahan derajat OA juga dipengaruhi oleh peningkatan kadar asam urat dan usia tua.

**Kata Kunci:** Osteoartritis lutut, Usia, Jenis Kelamin, Indeks Massa Tubuh, Kadar Asam Urat.

# **THE CORRELATION BETWEEN CHARACTERISTICS OF OSTEOARTHRITIS PATIENTS AND OSTEOARTHRITIS SEVERITY DEGREE BASED ON USG DESCRIPTION OF THE KNEE JOINT CARTILAGE**

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## **Abstract**

Age, gender, body mass index (BMI) and uric acid level are the most common risk factors for osteoarthritis severity degree. The aim of this study was to determine the relationship between the characteristics of OA patients and Osteoarthritis severity degree based on Ultrasonography (USG) description of the knee joint cartilage. Age, gender, BMI, and uric acid level taken from patients medical records, and the OA severity degree was diagnosed using USG examination. The type of this research is an analytical descriptive with cross-sectional approach. The subjects of this research were 40 patients collected using total sampling method at Al-Fauzan Hospital from 2017 to 2018. The result of this research showed that there was a significant relationship between BMI ( $p=0,004$ ) and Uric acid level ( $p=0,027$ ) with OA degree and there was no relationship between age ( $p=0,127$ ) and gender ( $p=0,655$ ) with Osteoarthritis severity degree. Body Mass Index was the most influential risk factor ( $OR=6,831$ ) for the progressivity of the OA degree based on USG description of the knee joint cartilage. OA patients with obese bodies have a risk of severe OA compared to thin and normal OA patients. Based on multivariate analysis, the severity degree of OA is also influenced by an increase in uric acid levels and old age.

**Keywords :** Knee Osteoarthritis, Age, Gender, Body Mass Index, Uric Acid Level