KORELASI DERAJAT HERNIA NUCLEUS PULPOSUS LUMBAL MENURUT KLASIFIKASI *MICHIGAN STATE UNIVERSITY* (MSU) TERHADAP PILIHAN TERAPI

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INTISARI

Latar Belakang : HNPL atau herniasi discus intervertebralis lumbal adalah suatu keadaan yang ditandai oleh protusi dari bagian nucleus pulposus ke dalam canalis spinalis di regio lumbal. Lebih dari 300.000 operasi pada kasus HNPL setiap tahun tanpa standarisasi yang objektif dari seleksi pasiennya. Efek yang ditimbulkan akibat nyeri HNPL adalah semakin terbatasnya aktifitas fisik dan sosial. Penilaian dengan modalitas MRI berdasarkan penderajatan *Michigan State University* (MSU) diharapkan dapat membantu dalam menentukan rencana penatalaksanaan selanjutnya.

Tujuan : Mengetahui korelasi hasil pencitraan MRI menurut klasifikasi MSU pada kasus Hernia Nuckleus Pulposus Lumbal (HNPL) terhadap pilihan terapi pada pasien dengan diagnosis Hernia Nucleus Pulposus Lumbal (HNPL).

Bahan dan Cara : Penelitian ini merupakan penelitian analitik observasional cross-sectional dan pengambilan sampel dengan cara retrospektif dan konsekutif tanpa pengacakan (*non-random consecutive sampling*). Penelitian ini dilaksanakan di RSUP Dr. Sardjito Yogyakarta dan telah ditentukan pilihan terapinya pada periode Maret hingga Agustus 2017. Subjek penelitian adalah pasien dengan HNPL yang sudah melakukan pemeriksaan menggunakan MRI dan telah ditentukan pilihan terapinya. Dilakukan uji korelasi Goodman-Kruskal Tau antara hasil citra MRI Lumbosacral dengan hasil protrusio di regio lumbal menurut klasifikasi MSU dengan pilihan terapi operasi maupun konvensional.

Hasil : Dari 35 subjek penelitian, Penderita HNP Lumbal terbanyak terjadi pada kelompok usia 51 – 60 (12 subyek, 34,3%) dan $\geq$ 60 tahun (13 subyek, 37,2%) dengan rerata usia 56,1 tahun. Terdapat 18 subjek laki-laki (51,4%) dan 17 subjek perempuan (48,6%). Korelasi antara penderajatan HNPL menurut MSU dengan pilihan terapi, $p > 0,05$.

Kesimpulan Tidak didapatkan korelasi yang signifikan secara statistik antara derajat hernia nucleus pulposus lumbal menurut klasifikasi MSU dengan variabel pilihan terapi yang dilakukan oleh dokter yang merawat.

Kata Kunci : hernia nucleus pulposus lumbal, klasifikasi MSU, *Magnetic Resonance Imaging*

CORRELATION OF LUMBAL PULPOSUS HERNIA NUCLEUS DEGREE ACCORDING TO MICHIGAN STATE UNIVERSITY (MSU) CLASSIFICATION OF THERAPY OPTIONS

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ABSTRACT

Background: HNPL or herniation of the lumbar intervertebral disc is a condition characterized by protusion from the part of the nucleus pulposus into the spinal canal in the lumbar region. More than 300,000 operations in HNPL cases every year without objective standardization of patient selection. The effect caused by HNPL pain is the limited physical and social activities. Assessments with MRI modalities based on Michigan State University (MSU) education are expected to assist in determining the next management plan.

Objectives: To understand the correlation of MRI imaging results according to MSU classification in the case of Lumbar Nuckleus Pulposus Hernia (HNPL) on treatment options in patients with a diagnosis of Lumbar Nucleus Pulposus Hernia (HNPL).

Materials and Methods: This study was an observational cross-sectional analytic study and the sampling was retrospective and consecutive without randomization (non-random consecutive sampling). This research was carried out in Dr. RSUP Sardjito Yogyakarta and its treatment options have been determined in the period March to August 2017. The research subjects were patients with HNPL who had undergone an examination using MRI and their treatment options were determined. Goodman-Kruskal Tau correlation test was conducted between Lumbosacral MRI image results and protrusion results in the lumbar region according to MSU classification with both conventional and surgical treatment options.

Results: In the 35 research subjects, the majority of Lumbar HNP sufferers occurred in the age group 51 - 60 (12 subjects, 34.3%) and ≥ 60 years (13 subjects, 37.2%) with an average age of 56.1 years. There were 18 male subjects (51.4%) and 17 female subjects (48.6%). The correlation between HNPL assessment according to MSU with treatment options, $p > 0.05$.

Conclusion: There was no statistically significant correlation between the degree of lumbar nucleus pulposus according to MSU classification and the choice of treatment variables performed by the treating physician.

Keywords: Herniation Nucleus Pulposus Lumbar, MSU classification, Magnetic Resonance Imaging