The role of inflammation in sciatica: the contradictory effect of macrophages

Djuric, N.

Curriculum Vitae

Niek Djuric was born in Hilversum, the Netherlands on the 21st of February 1995. In 2013 he obtained his high school diploma from the 'Gemeentelijk Gymnasium Hilversum'. That same year, he won the 'EGERIA fund for young entrepreneurs' for his idea to provide personal training and diet advice online. After he finished high school he started studying medicine at the University of Leiden. In 2014, whilst continuing his medicine study, he started a second bachelor, biomedical sciences at the VU University Amsterdam. He finished his bachelor in medicine in 2016 and biomedical sciences in 2017. During the last year of biomedical sciences he began with the MD-PhD track at the neurosurgery department in the Leiden University Medical Center (supervisors Prof. dr. W.C. Peul and Dr. C.L.A. Vleggeert-Lankamp), during which he focused on the role of inflammation in sciatica. In 2017, after being inspired by the neurosurgery department, he continued his studies with a master in Neuroscience at the VU university, during which he went to Ganga Hospital in Coimbatore, a city in the south of India for a 5 month fellowship in the beginning of 2019. At Ganga hospital, he worked as a researcher in a lab specialized in proteomics. He subsequently finished his master's degree in early 2020, which was around the same time that he started his masters in Medicine. During his days as a student, he worked as an independent contractor in multiple pharmacies where he consulted patients with multiple medications that often suffered from side effects. As a PhD student, he won the 'EANS research fund' for the EIMICOR study protocol, and got to present his work at various congresses: the 19th European congress of Neurosurgery in Dublin, 21st EUROSPINE meeting in Helsinki, Dutch Spine Society annual meeting in Rotterdam and the 47th ISSLS annual meeting.

List of publications

1. **Djuric N**, Yang X, Ostelo RWJG, van Duinen SG, Lycklama A Nijeholt, van der Kallen BFW, Peul WC, Vleggeert-Lankamp CLA, *Gadolinium Enhancement Is Not Associated With Disc Inflammation in Patients With Sciatica.* Spine (Phila Pa 1976), 2019. 44(12): p. E742-E748

2. **Djuric N**, Yang X, Ostelo RWJG, van Duinen SG, Lycklama A Nijeholt GJ, van der Kallen BFW, Peul WC, Vleggeert-Lankamp CLA, *Disc Inflammation and Modic changes show an interaction effect on recovery after surgery for lumbar disc herniation.* Eur Spine J, 2019. 28(11): 2579-2587

3. **Djuric N**, Lafeber GCM, Vleggeert-Lankamp CLA, T*he contradictory effect of macrophage-related cytokine expression in lumbar disc herniations: a sytematic review.* Eur Spine J, 2019. 29(7):1649-1650

4. **Djuric N**, Yang X, El Barzouhi A, Ostelo RWJG, van Duinen SG, Lycklama A Nijeholt GJ, van der Kallen BFW, Peul WC, Vleggeert-Lankamp CLA, *Lumbar disc extrusions reduce faster than bulging discs due to an active role of macrophages in sciatica.* Acta Neurochir (Wien), 2020.162(1):p.79-85.

5. **Djuric N,** Rajasekaran S, Thangavel C, Raveendran M, Soundararajan DCR, Nayagam SM, Matchado MS, Anand KSSV, Influence of different endplate pathologies on the inflammation profile of hernited discs: a proteomic approach. Eur Spine J. 2021. Accepted.

6. **Djuric N,** Lafeber G, van Duinen SG, Vleggeert-Lankamp CLA, *Exporing macrophage differentiation in herniated disc tissue in patients with radiculopathy; is this associated with Modic changes?* Submitted

7. **Djuric N**, Lafeber G, van Duinen SG, Bernards AT, Peul WC, Vleggeert-Lankamp CLA, *Study protocol: Effect of infection, Modic and Inflammation on Clinical outcomes in surgery for radiculopathy (EIMICOR).* BMC Neurology 2021, Accepted

8. Rajasekaran S, Tangavel C, **Djuric N**, Raveendran M, Soundararajan DCR, Nayagam SM, Matchado MS, Anand KSSV, *Part 1: profiling extra cellular matrix core proteome of human fetal nucleus pulposus in search for regenerative targets.* Scie Rep, 2020. Sep 24;10(1):15684

9. Rajasekaran S, Soundararajan DCR, Nayagam SM, Tangavel C, Raveendran M, Thippeswamy PB, **Djuric N,** Anand KSSV, Shety AP, Kanna RM, *Modic changes are associated with activation of intense inflammatory and host defense response pathways - molecular insights from proteomic analysis of human intervertebral discs.* Spine J, 2021. Jul 22;S1529-9430(21)00818-4