**Title:** Pilot Testing of Usability of the Nine Hole Peg Test in Occupational Therapy in Patients with Rheumatoid Arthritis and in Patients with Hand Osteoarthritis

## Abstract:

Occupational therapists can objectively assess manual dexterity in patients with rheumatoid arthritis (RA) or hand osteoarthritis (OA) using Nine Hole Peg Test (NHPT). It is performed according to a manual that includes precise instructions. The subject is required to place nine pegs from the container into the pegboard as quickly as possible and return them straight away. The time required to complete the test is measured with a stopwatch.

The aim of the bachelor thesis is to perform a pilot testing of usability of a new Czech translation of the NHPT manual in patients with RA or with OA.

The partial goal is to obtain video documentation during the administration of the Nine Hole Peg Test and to create recommendations for using this test in practice in patients with RA or with OA.

With an approval of the Ethics Committee of the Institute of Rheumatology Prague, 19 patients (8x RA, 11x OA; 14 female, 5 male) were tested using NHPT.

Analysis of the data revealed that the instructions were comprehensible for the administrator and all patients. Some ambiguity was found in the part of the instructions where the patient should only listen and observe the demonstration.

The new Czech NHPT manual can be used in practice. Clarity could be improved by editing the ambiguity. Video documentation was made during the administration of the NHPT. The pilot testing suggests that it is appropriate to monitor the level of pain experienced before and after NHPT in patients with RA or OA.

**Key words:** occupational therapy, Nine Hole Peg Test, rheumatoid arthritis, osteoarthritis