

**Abstract bachelor's thesis:**

Bachelor's thesis deals with the use of Frenchay Arm Test to study the effect of botulinum toxin to patients with spasticity after brain damage. A question is raised, whether Frenchay Arm Test, is test of self-sufficiency and hand function, is useful for monitoring the effects of botulinum toxin in these patients.

The theoretical part explains the physiology of human movement and the consequences of brain damage to motoric. It deals with the increased stretch muscle, i.e. spasticity of patients after brain damage. Furthermore, it introduces the theory of application of botulinum toxin, which in small amounts affects spasticity and helps promote self-sufficiency of a patient. Frenchay Arm Test is presented as appropriate diagnostic method and benefits of applying this method by Occupational therapist are described. In the practical part, the Frenchay Arm Test is applied to two patients prior to application of botulinum toxin, month after and three months after application.

The results are evaluated based on modified Frenchay scale and complemented by labels marking individual acts. The emphasis lies on the overall rehabilitation of the patient, which is considered a key to the successful treatment.

**Keywords:**

Spasticity, Botulinum, Frenchay Arm Test, Brain Damage, Occupational Therapy, Grip, Stroke