

## Cervical related disability – interactions of pain features, psychological states and clinical presentation

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### Abstract

**Background:** Cervical pain related to different spine pathologies is a major cause of disability. The relationship between clinical patterns, pain, psychological states was demonstrated. Disability in patients with cervical pain remains still high.

**Material and methods:** A total of 42 patients (14 males, 28 females) with cervical pain were assessed using visual analogue scale (VAS), hospital anxiety and depression scale (HADS), patient health questionnaire-9 (PHQ-9), neck disability index (NDI) and other clinical data.

**Results:** Acute pain was present in 24 % of patients while gradual in 76%. Among clinical patterns the most common form was referred pain (52%) followed by axial neck pain (33%) and radiculopathy in (14%). NDI correlated with pain intensity (VAS) and the psycho-emotional state (for HADS and PHQ-9,  $p < 0.001$ ). A higher depression score was found in patient with referred pain and radiculopathy (mean 8.0 points  $\pm$  4 points according to PHQ9 score). Also, NDI was higher in patients with comorbidities, current joint pain and systemic disorders, referred pain, with acute onset, and no previous trauma.

**Conclusions:** The results from the current study highlighted an association between NDI and pain intensity and psychological state, predominantly in the group with referred pain, and radiculopathy. Acute cervical pain, with no previous trauma, with systemic disorders and other joint pain interfered with a higher risk for developing disabilities. Further research looking at multiple factors such as clinical presentation features of cervical pain and clinical outcomes will additionally guide the development of adequate management strategies for cervical pain.

**Key words:** cervical pain, neck disability index, depression, psycho-emotional state.

## Institute of Emergency Medicine experience in the endovascular treatment of acute ischemic stroke

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### Abstract

**Background:** Mechanical thrombectomy is the method of choice and can be the only useful method in the treatment of acute ischemic stroke caused by large vessel occlusions. Mechanical thrombectomy has been used in the Institute of Emergency Medicine since 2018. The results of treatment during this period are presented in this paper.

**Material and methods:** 25 patients hospitalized in the Institute of Emergency Medicine with acute ischemic stroke during the years 2018-2021, for whom the procedure of mechanical thrombectomy by stent retriever or stent retriever plus aspiration catheter was applied, were subjected to retrospective study. Several patients' variables were assessed, including the quality of revascularization (Thrombolysis in Cerebral Infarction Score) and the modified Rankin score at 90 days.

**Results:** Successful recanalization (Thrombolysis in Cerebral Infarction Score at least 2B) was obtained in 84.6% of patients, the score of 3 was achieved in 65.4% of patients. Hemorrhagic complications were established in 2 cases. Estimated mortality was in 23.1% of cases. Of all patients who completed three months from re-permeabilization by May 2021, 58.8% show a modified Rankin score of 0 – 2.

**Conclusions:** The implementation of mechanical thrombectomy in acute stroke completes the protocol of providing specialized healthcare within the stroke unit and improves the treatment results in this unit.

**Key words:** stroke, large vessel occlusion, thrombectomy.