

categorized into 4 types: 1) Experimental studies, 2) Clinical studies studying the effects of pain on respiration, 3) Clinical studies studying the effects of respiratory exercises on self-reported pain and 4) Experimental studies that follow for the purpose of determining the effect of the trained respiratory pattern on the pain induced in laboratory conditions. Most of the clinical studies analyzed (around 75%) report a beneficial pain-relieving effect following at least one of the respiratory techniques. Even if these results are promising other therapeutic active factors such as relaxation, massage, meditation, sea sounds etc. they may be equivalent involved in generating these balance sheets.

**Conclusions.** Following the analysis of studies regarding the association between respiration and pain, both physiologically and psychologically, an interesting and significant connection is determined. Most clinical studies document the benefit of Slow Deep Respiration (SDB) in relation to pain relief, but experimental studies do not consistently achieve this result, as does the case of a direct correlation between breathing and hypoalgesia (an indirect mechanism being more plausible). In the near future the following questions require an answer: 1) Do such psycho-behavioral mechanisms such as concentration, distraction, anticipation and self-control caused by the instructed breathing reduce pain? 2) What other processes central to Deep Slow Breathing (SDB) can induce respiratory hypoalgesia and what can we conclude from the literature on animals in this regard?

**Key words:** Pranayama, SDB, Abdominal Breathing.

### **30. DIFFERENTIAL DIAGNOSIS OF INTRACEREBRAL HAEMORRHAGES. CASES FROM THE INSTITUTE OF NEUROLOGY AND NEUROSURGERY**

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**Background.** Intracerebral hemorrhage (ICH) is the second most common type of stroke, responsible for about 20% of total number of cerebrovascular accidents. There are many pathologies associated with ICH, some related to common vascular risk factors like hypertension, others related to ruptured saccular aneurysm, and vascular malformation, and others to neurodegeneration like amyloid angiopathy.

**Case report.** We present a series of cases of intracerebral haemorrhages related both to the most common causes and mechanisms of ICH, as well as other, less frequent, pathologies that could manifest as a hemorrhagic stroke. Differential diagnosis is based on hematoma localization, size and shape, age of the patients, and vascular risk factors. We also present data on prognostic factors for hematoma growth and outcome. All cases were collected from the Institute of Neurology and Neurosurgery "Diomid Gherman", Chișinău, Republic of Moldova.

**Conclusions.** Although ICH is the second leading cause of stroke, there is a wide range of pathologies that can result in intracerebral hemorrhage and require an extensive work-up, especially in young patients without vascular risk factors.

**Key words:** intracerebral hemorrhage, ICH, hypertension, amyloid angiopathy, CAA, hematoma, aneurysm