

# POST TRAUMATIC HEADACHE IN YOUNG PEOPLE AFTER CONCUSSION

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## Background

- Approximately 25,000 Danes suffers from concussion/mild traumatic brain injury (mTBI) each year
- Even after 3 months of mTBI, 5-15% still continue with post-traumatic headache (PTH)
- PTH is classified as a secondary headache type according to the International Classification of Headache Disorders
- Research reports about the presence of several phenotypes of PTH i.e migraine, probable migraine, tension type, cervicogenic or unclassifiable
- It is uncertain how much known headache before trauma predisposes to PTH
- It is also unclear how much neuro inflammation is involved in development of PTH
- This is an area with disagreement about aetiology, pathophysiology and treatment



## Aim

- To look at changes in the frequency and the type of PTH
- To investigate the effect of active treatment on PTH
- To compare the level of neuro inflammatory markers in serum

## Materials and methods

- The ongoing project is a part of a larger epidemiological prospective cohort study with concussion in middle region of Denmark (Region Midtjylland)
- The patients are identified through their electronic journals and they receive a questionnaire (Rivermead Post Concussion Symptoms Questionnaire) after two months of concussion

- Young people with persistent symptoms (symptom score >20) is offered an assessment by a neurologist and child-adolescent psychiatrist after three months of concussion
- Once the inclusion criteria are fulfilled they are offered participation in a treatment study (n=100)
- The treatment in the active group is an ambulant treatment based on cognitive behavioural therapy and graded exercise. Standard treatment consists of information
- The participants answers a questionnaire about headache at 3, 6, 9 and 18 months and also about the effect of treatment on headache at 6, 9 and 18 months after mTBI
- Blood samples will be taken at 3 and 9 months after mTBI to measure neuro inflammatory markers
- Status: there have been included three patients until now