QUALITY OF LIFE AFTER ACUTE MUSCULOSKELETAL TRAUMA

-CONSEQUENCES OF CHRONIC PAIN-

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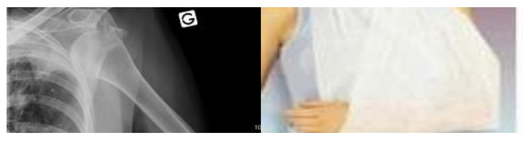
Fracture



Luxation

Distortion

Contusion

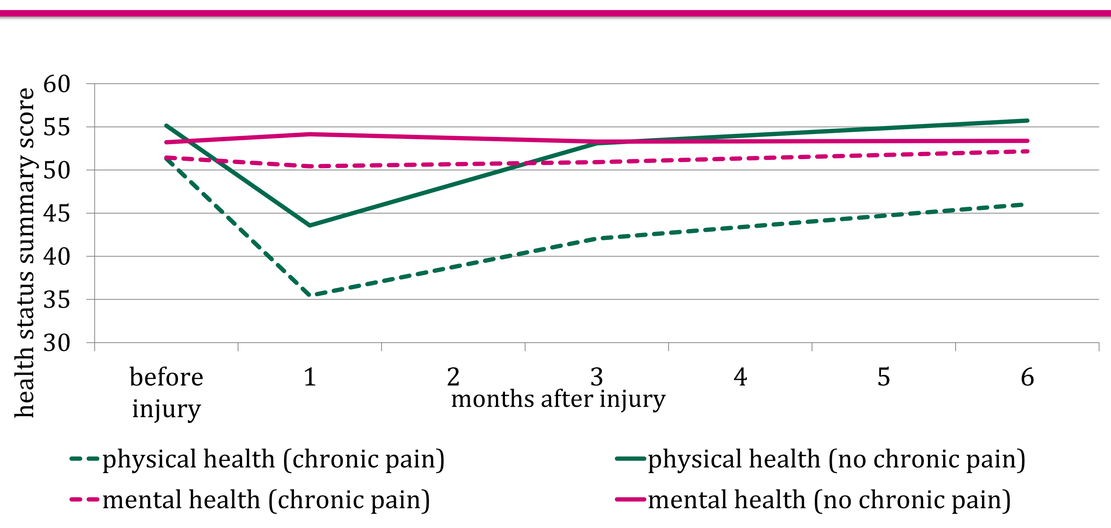
BACKGROUND AND AIMS

- Physical disability and mental morbidity are frequent and important complications of injury posing sometimes serious consequences for the patient resulting in a decreased health-related quality of life (HRQoL).
- This study aimed to evaluate (1) health status and quality of life one, three and six months after injury relative to the state before injury, (2) changes in health status and quality of life over time and, (3) consequences of developing chronic pain on HRQoL in adult patients with extremity injury of the musculoskeletal system.

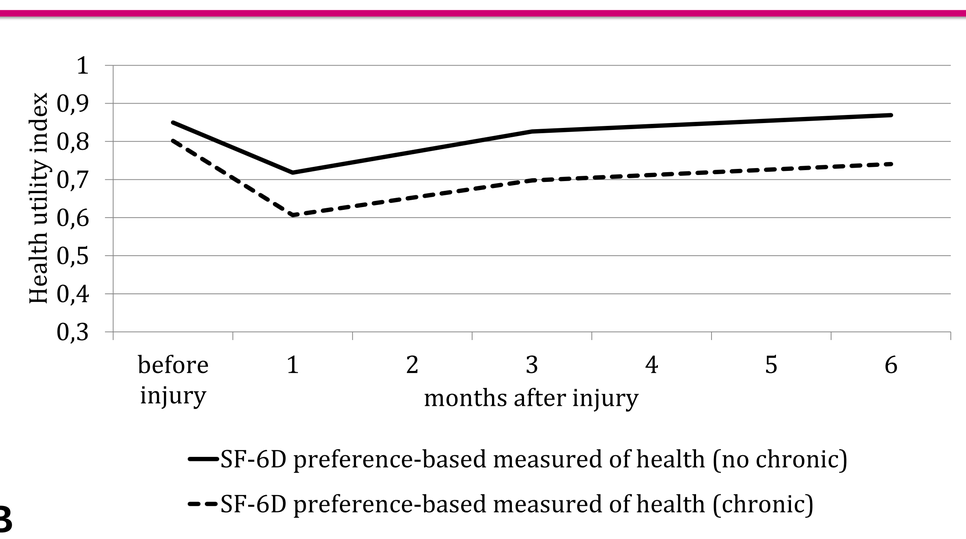
STUDY DESIGN AND POPULATION

- This prospective cohort study included 390 adult patients who presented the ED with acute musculoskeletal pain.
- The Short Form (SF)-36 Health Survey was used to measure health status and the SF-6D, was used to measure HRQoL utility. SF-36 scoring algorithms were used to assess eight domains of health status, the physical component summary scores for physical health status and mental component summary scores for mental health status. The health utility measure SF-6D used 10 items of the SF-36. An additive econometric model was used to compute the health utility index, using community value weights. The endpoints on a life-death scale for the SF-6D utility index are 1.00 (best possible HRQoL state) and 0.30 (worst possible HRQoL state).
- Longitudinal data analysis was performed with GLM for repeated measurements.
- Outcomes were analyzed in two groups: patients who did develop chronic pain and patients who did not.
- Chronic pain was defined as having pain (NRS≥1) six months after injury.

RESULTS



A



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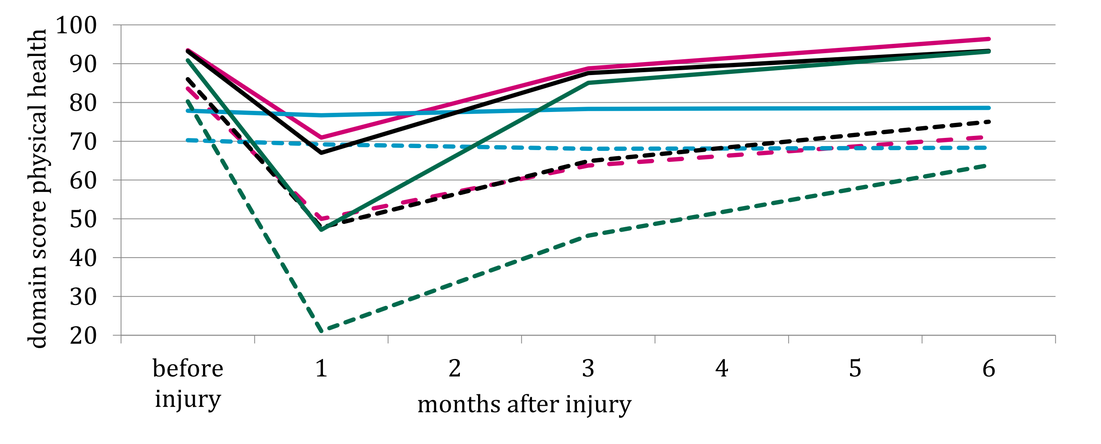

C

A. Overall there was a large decrease in score from 53.4 to 39.9, in the physical health status due to musculoskeletal injury. This decrease within a month after injury was higher in patients who develop chronic pain (30.9% vs 21.0% without chronic pain). Patients who did not develop chronic pain returned to the same physical health levels as before injury. Chronic pain patients had a lower physical health status at six months follow-up than before injury (46.0 vs 51.3). Mental health status for both chronic and non-chronic patient did not significantly change over time. There was an small increase in mental health between three and six months after injury, especially in patients who develop chronic pain.
B. The SF6-D utility scores also changed over time, with a large decrease from 0.82 to 0.67 immediately after injury. For patients who did not develop chronic pain the utility score increased back after six months follow-up to the level the patient had before injury. For patients who develop chronic pain utility scores remained lower than before injury. The SF-6D utility scores six months after injury obtained from chronic pain patients were 0.13 utilities lower (0.87 vs 0.74) than those without developing chronic pain.
C. Across the four domains related to physical health status, only general health did not change over time. This domain is about changes of general health compared with one year before.

DISCUSSION

- This study examined short- and long-term outcomes from musculoskeletal injury and compared the group of patients who developed chronic pain with the group who did not.
- The overall physical health is strongly decreased immediately after acute musculoskeletal injury. This normalizes after six months for patients who are recovering from injury, but not for chronic pain patients.
- Mental health scores for chronic pain patients are comparable to scores before injury. The health utility values at six months are much lower for chronic patients than patients who fully recover.

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PROTACT

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