

Incidence and predictors of chronic pain after musculoskeletal injury

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Conflict of Interest Disclosure

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Title: Incidence and predictors of chronic pain after musculoskeletal injury

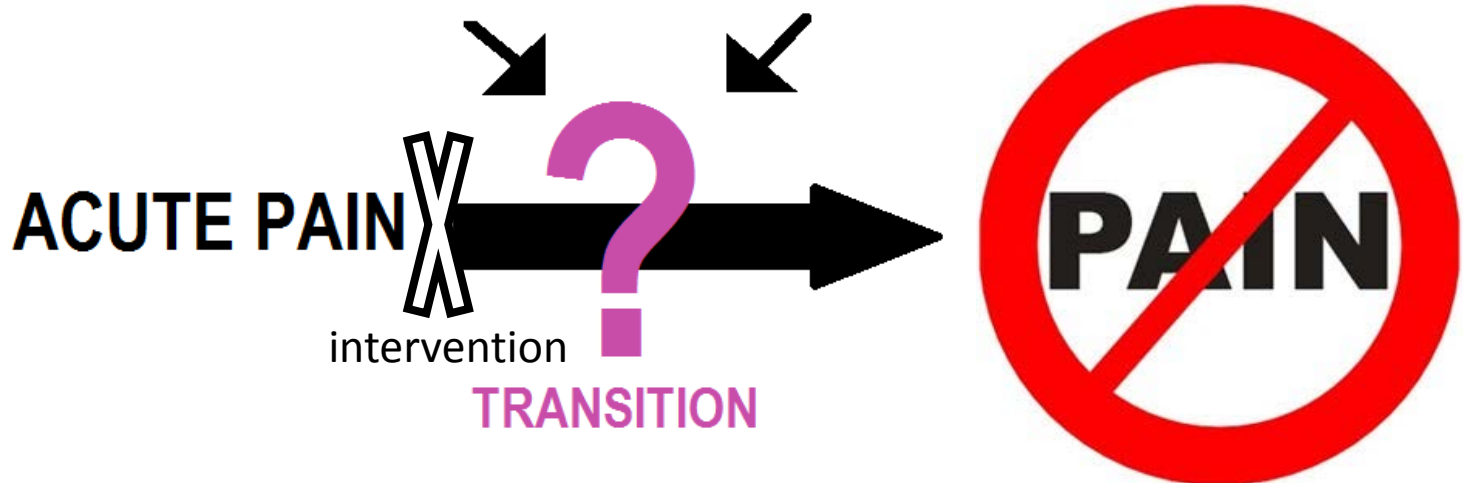
- Member of a scientific committee YES NO
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If so: ...
- Leader of research of clinical study YES NO
If so: ...

Background & aim



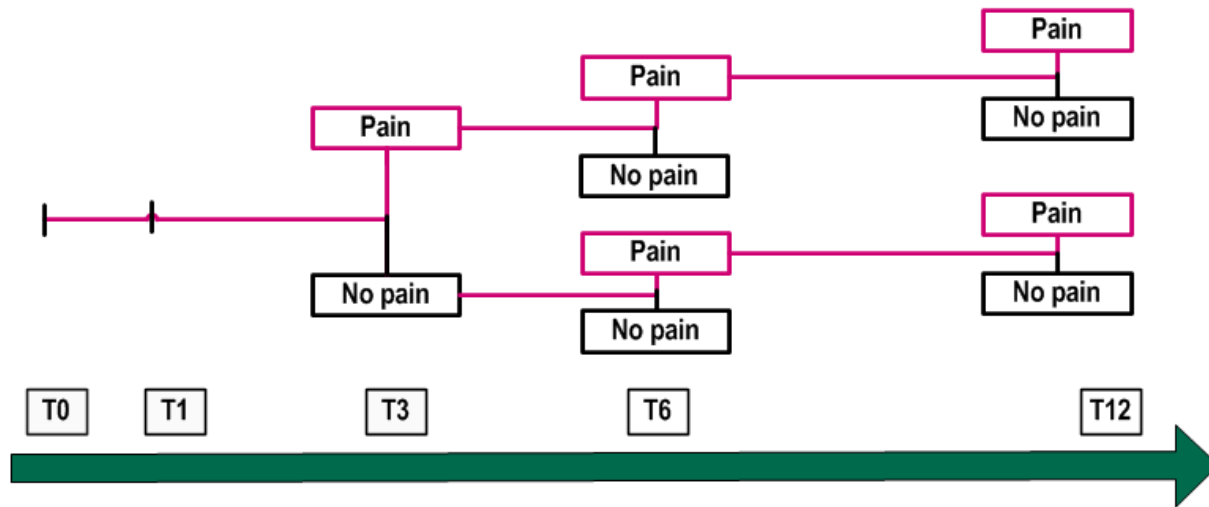
PSYCHOSOCIAL FACTORS

BIOMEDICAL FACTORS



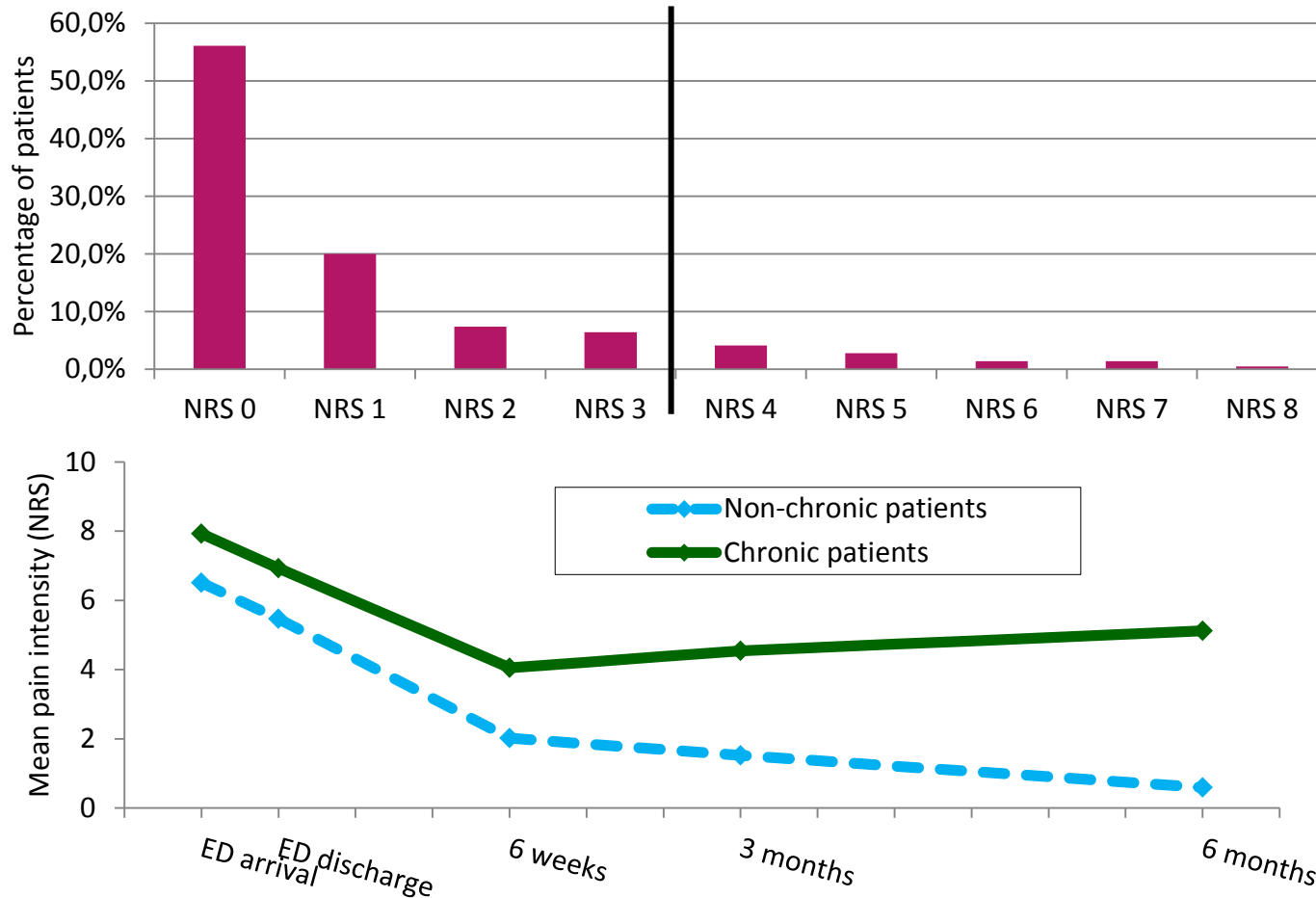
Methods

- Design: prospective cohort study (one year follow-up)
- Study population: 435 adult patients with isolated injury due to blunt trauma to the extremities of the musculoskeletal system
- Setting: emergency department of Medisch Spectrum Twente
- 26 potential predictors
- The primary outcome at six months follow-up: chronic pain (NRS ≥ 4)



Results

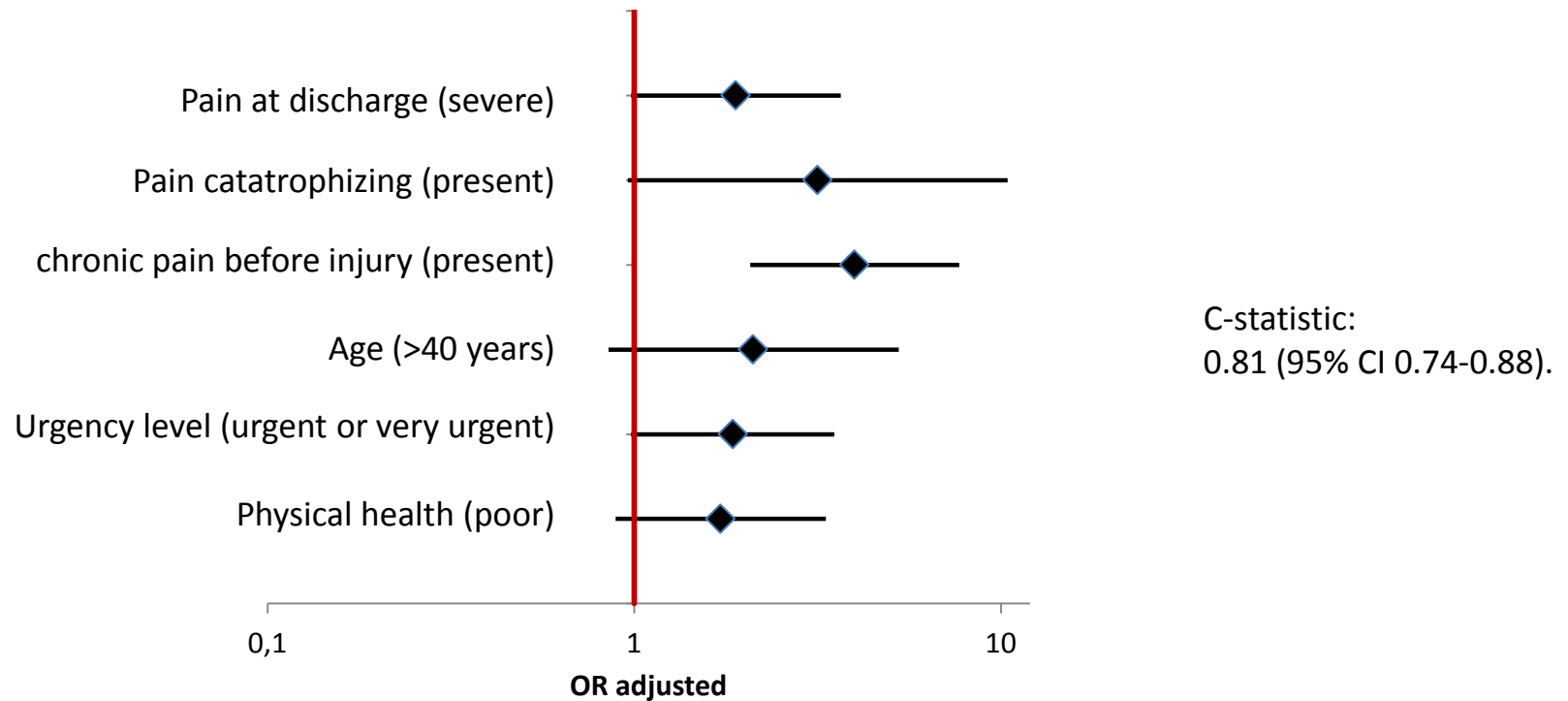
incidence of chronic pain



- 43 out of 435 patients (9.9%) developed chronic pain (NRS≥4)
- 43.9% of the patients had some degree of pain

Results

six predictors independently associated with chronic pain



*Probability of developing chronic pain = $1 / (1 + \exp(-(-4.02 + 0.75 * (\text{age}_{\geq 40 \text{ years}}) + 0.64 * (\text{pain at discharge}_{\text{severe}}) + 1.15 * (\text{pain catastrophizing}_{\text{present}}) + 1.38 * (\text{chronic pain before injury}_{\text{present}}) + 0.62 * (\text{urgency level}_{\text{urgent or very urgent}}) + 0.54 * (\text{physical health}_{\text{poor}})))$*

Conclusion

- Almost 10% of patients had chronic pain (NRS \geq 4) six months after musculoskeletal extremity injury & 43.9% of the patients had some degree of pain.
- Only 2 out of the 6 predictors, severe pain at discharge and pain catastrophizing, are potentially modifiable.

Thank you for your attention!

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