BIOMEDICAL AND PSYCHOSOCIAL FACTORS OF PATIENTS WITH ACUTE MUSCULOSKELETAL PAIN

Towards preventing chronic pain

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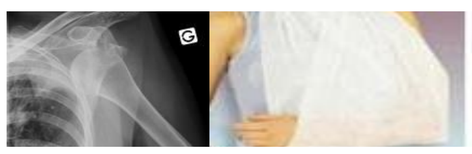
Fracture



Luxation

Distortion

Contusion

BACKGROUND

- Acute pain following traumatic injury is one of the most frequent reasons why patients are seeking medical care.
- This pain is complex and multifactorial; a combination of cognitive, affective, and trauma factors may be involved in pain perception and the transition from acute to chronic pain.
- Only a few studies assessed these characteristics of patients with musculoskeletal trauma in the Emergency Department (ED) in the Netherlands.

OBJECTIVE

To describe trauma, affective and pain characteristics of patients with acute musculoskeletal trauma to the extremities.

STUDY DESIGN AND POPULATION

A prospective follow-up study
- 314 adult patients with injury due to blunt trauma to the extremities of musculoskeletal system admitted to the ED of Medisch Spectrum Twente, Sept 2011 – March 2012.
- Data collection: hospital registration and questionnaires at baseline and 6 weeks.

RESULTS

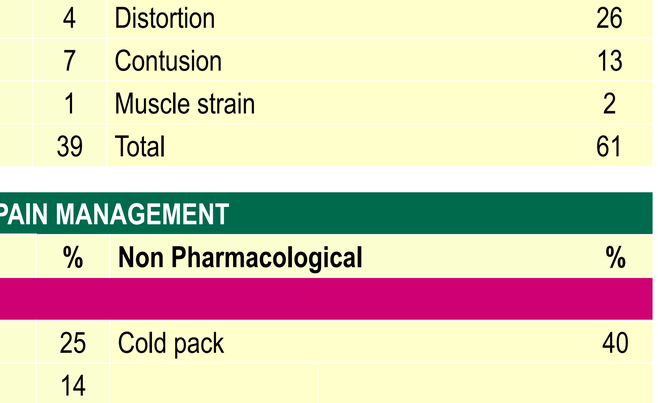
CHARACTERISTICS OF ACUTE MUSCULOSKELETAL TRAUMA PATIENTS		
	%	**Mean (SD)**
Demographic characteristics		
Age		40.1 (15.1)
Women	50	
Pain characteristics		
Pain as main reason	74	
ED visit within 2 hours after onset of pain	47	
Pain (score) at arrival ED (patient)	99	6.3 (2.3)
Pain (score) at discharge ED (patient)	97	5.6 (2.5)
Pain (score) according to MTS (nurse)	100	3.5 (1.4)
Pain (score) after 6 weeks (patient)	68	1.7 (1.9)
Psychosocial characteristics		
Symptoms of Depression at baseline	7	
Symptoms of Anxiety at baseline	12	
Pain catastrophizing after 6 weeks	4	
Kinesiophobia after 6 weeks	27	

Biomedical characteristics			
Upper extremities	**%**	**Lower extremities**	**%**
Fracture	25	Fracture	22
Luxation	2	Luxation	0
Distortion	4	Distortion	26
Contusion	7	Contusion	13
Muscle strain	1	Muscle strain	2
Total	39	Total	61

PAIN MANAGEMENT			
Pharmacological	**%**	**Non Pharmacological**	**%**
Before attending the ED (58%)			
Self-medication	25	Cold pack	40
Received medication from professional	14		
During and after ED visit			
Pain medication only	8	Immobilization	61
Pain medication and prescription	10	Cold pack	1
Prescription for pain medication only	9		
-whereof filled in	96		
Overall after injury untill 6 weeks			
Pain medication	39		

DISCUSSION

- This study provides insight in characteristics, pain and pain management of patients with acute musculoskeletal trauma.
- Multiple factors within this acute pain phase may be responsible for the transition from acute to chronic pain after trauma.
- Prognostic factors will give us the ability to target high-risk patients already in the acute care setting and provide them with appropriate treatment to avoid the development and subsequently the consequences of chronic musculoskeletal pain.



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PROTACT

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