



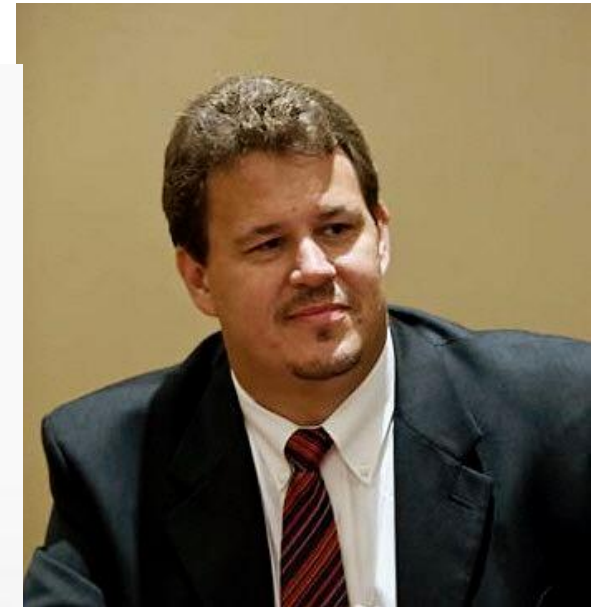
INNOVATION IN COMPRESSION THERAPY
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Compression with a non-elastic Velcro compression device in patients undergoing total knee arthroplasty

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Sharing knowledge and skills (2014)



Introduction

Total knee arthroplasty :

- Successful operation in the management of osteoarthritis
- Prevalence osteoarthritis in general practice in the Netherlands:
 - 14,3 / 1000 male
 - 23,8 / 1000 female
 - 20.000 operations a year (2010)
 - Increasing numbers
- **Early mobilization and optimal analgesics** has reduced hospital stay and morbidity without increased re-admissions

Introduction

Problems in patients undergoing a knee arthroplasty are :

- Pain
- Swelling
- Decrease in knee-extension strength,
- Decrease in Range of Motion
- Wound problems (infection, dehiscence)
- Decline in functional performance

Introduction

- Our hypothesis is that the use of the Juxta Reduction Kit, applied immediate post-operatively and worn 24/7 for 6 weeks will prevent excessive swelling and initiate an earlier reduction of the swelling, allowing a more effective rehabilitation.

Methods / design

Usual Care / Control group (20)

- Immediately post OP - 24h post OP bandages Elastomull Haft ®
- From 24h until 6 weeks post OP an anti-thrombosis stockings
- Rapid Recovery

Treatment group (20)

- Immediately post OP until 6 weeks post OP 24/7 Juxta Reduction Kit + -Struva anti-trombosis stocking (class 2)
- Rapid Recovery



Methods / design

1. Feasibility study

Data collection :

- measurement protocol
- the number and reasons of patients recruited and dropped out
- wearing comfort
- possibilities to exercise
- sort and number of complications
- time required for measurements, preparation JRK, administration

Methods / design

2. Create a first insight in the results of the intervention with the JRK, compared with usual care (observational comparative study).

Data collection (To, T1, T2, T14, T42, T84)

- Gender, BMI, age, ASA, use of compression pre-op
- Total leg volume and knee circumference
- Pain in action and in rest
- Range of Motion
- Timed Up and Go
- Demmi
- 6 minutes walking test
- Wound aspects