



CMRC seminar

Wednesday the 11th of October
from 14.30 to 16.30
at Dam auditorium, Panum Institute, Blegdamsvej 3

The overloaded and painful muscle and tendon

- 14.30 Introduction
- 14.35 **Biochemical changes in overloaded and ruptured tendons**
Professor Graham Riley.
Rheumatology Research Unit, Cambridge University, UK.
- 15.00 **IGF1 isoform expression in tendon after various loading pattern**
PhD student Katja Heinemeier.
Institute of Sports Medicine, Bispebjerg Hospital.
- 15.15 **Painful tendon: Can physical training improve collagen formation**
Assistant professor Henning Langberg.
Institute of Sports Medicine, Bispebjerg Hospital.
- 15.25 Break
- 15.40 **Acute overloaded skeletal muscle: morphological and biochemical alterations in the recovery phase**
Assistant professor Truls Raastad.
Institute of Sports Science, Oslo University, Norway.
- 16.05 **Does physical training help in the treatment of chronic painful muscle?**
PhD student Lars Andersen/assistant professor Henriette Pilegaard.
Arbejdsmiljøinstituttet and August Krogh Institutttet.
- 16.20 Discussion
- Chair: Michael Kjær

The muscle tendon unit is a prerequisite in any exercise performance and both acutely and chronically these structures can be overloaded. Several changes are known to occur with acute overloading of muscle and some of the mechanisms behind recovery in skeletal muscle, especially with emphasis on inflammation, will be highlighted. With more chronic overloading both tendon and muscle can become painful and some of the expressional changes, not only in chronically painful tendon, but also in ruptured tendon, will be discussed. Several growth factors are important in the adaptation of tendon to loading and role of IGF1 in relation to different loading patterns will be covered. With regards to treatment it remains debatable to what extend an overloaded and painful structure will respond favorable towards additional loading and both results from training studies in tendon as well as skeletal muscle will be presented in this symposium.