

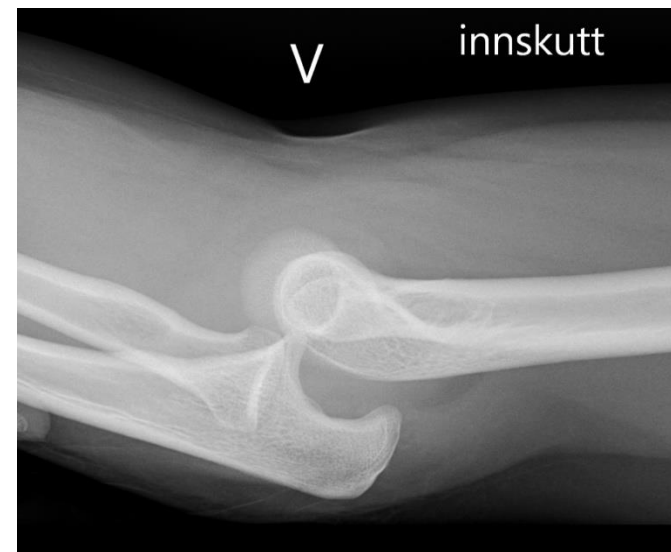
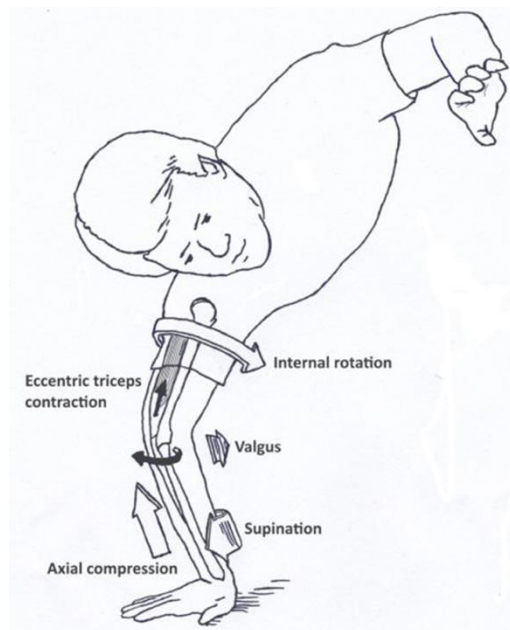
# Fysioterapioppfølging ved albueskader

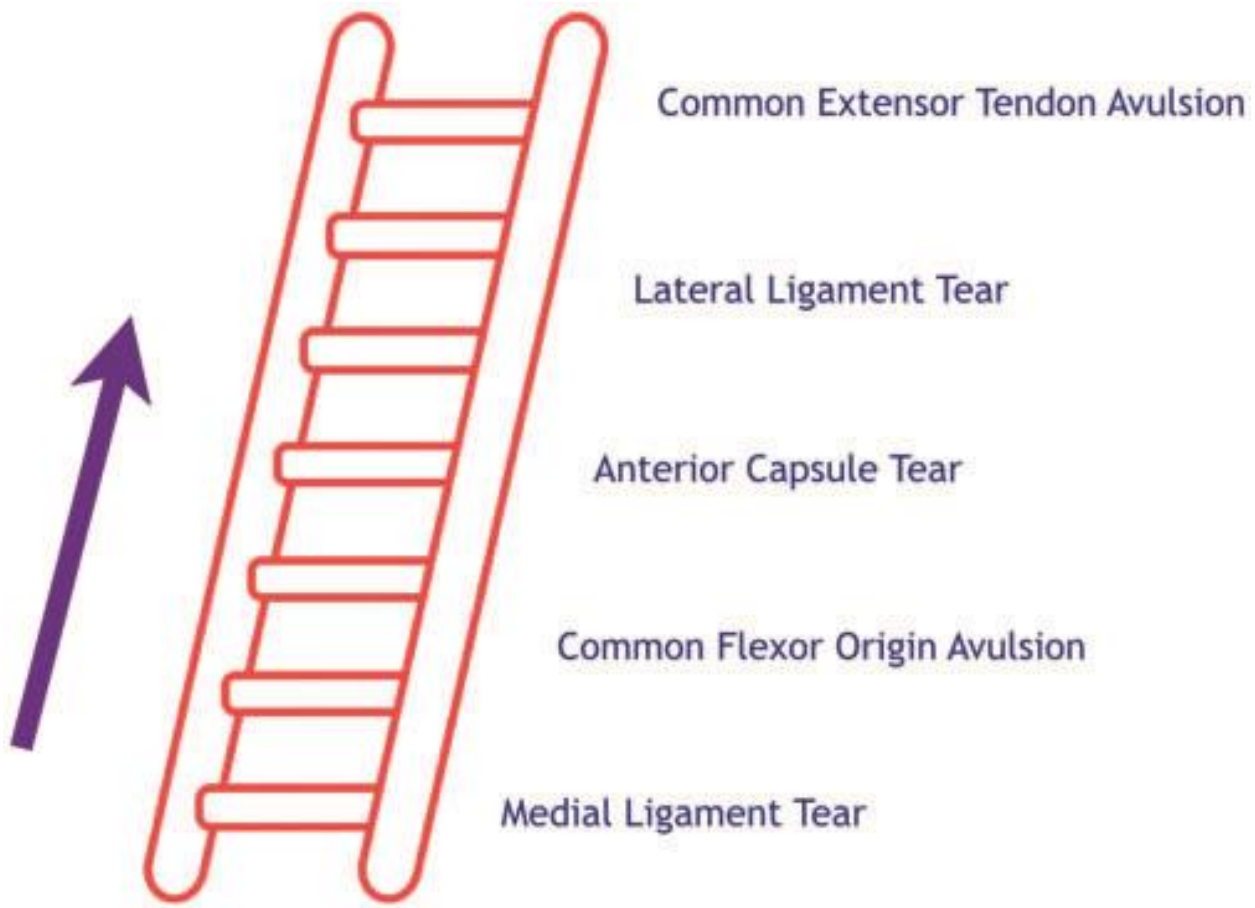
29.11.24

Tonje Westlie

Ortopedisk rehabilitering Aker/KTAK

# Simple albuelukasjoner





RESEARCH Open Access

## Treatment strategies for simple elbow dislocation - a systematic review

Franziska Lioba Breulmann<sup>1</sup>, Sebastian Lappen<sup>1</sup>, Yannick Ehmann<sup>1</sup>, Martin Bischofreiter<sup>2,3</sup>, Lucca Lacheta<sup>1</sup> and Sebastian Siebenlist<sup>1\*</sup>



**E** REVIEW ARTICLE

**Shoulder & Elbow**

## Simple elbow dislocation

Paul M. Robinson, Emmet Griffiths and Adam C Watts

Shoulder & Elbow  
2017, Vol. 9(3) 195-204  
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DOI: 10.1177/1758573217694163  
journals.sagepub.com/home/sel  
SAGE

J Shoulder Elbow Surg (2017) ■■■ ■■■ ■■■



ORIGINAL ARTICLE

## Extensive soft tissue lesions in redislocated after simple elbow dislocations

Lars E. Adolfsson, MD<sup>a,b</sup>, Jens O. Nestorson, MD<sup>a,b</sup>, Johan H. Scheer, MD, PhD<sup>a,b,\*</sup>



# Rehabilitering av simple luksasjoner

- 0-6 uker - 0,5/1 kg

AROM/PROM

Ligamentbesparende øvelser

Stabilitet (underarm)

- 6-12 uker – unngå tung belastning/maksbelastning

AROM/PROM

Stabilitet

Gradvis økende belastning

- Idrett 5-6 mnd

## Ligamentskade

\*Trygg fleksjon- og ekstensjonstrening: nøytral underarmsrotasjon

\*Trygg rotasjonstrening med albuefleksjon  $\geq 90^\circ$

\*Forsiktighetsreglene gjelder normalt første 6-8 ukene



# Pasientkasus



*God artikulasjon. Total ruptur av radiale kollateralligament og lig annulare. Totalruptur av fleksorseneinnfestningen, Subtotal/total MCL. Stort hydrops*



# Den gode samtalen

Immobilisert

Usikker

40 – 110 grader

Redusert avspenningsevne

Hyperaktivitet i fleksjonsmuskulatur



J Shoulder Elbow Surg (2019) 28, 1431-1440

ELSEVIER

JOURNAL OF  
SHOULDER AND  
ELBOW  
SURGERY

www.elsevier.com/locate/jse

ELBOW

**Psychosocial factors affecting variation in patient-reported outcomes after elbow fractures**

Prakash Jayakumar, MBBS, BSc (Hons), MRCS (Eng), FMSEM, DPhil<sup>1,2,\*</sup>,  
Teun Teunis, MD, PhD<sup>1</sup>, Ana-Maria Vranceanu, PhD<sup>2</sup>, Meredith Grogan Moore, BS<sup>1</sup>,  
Mark Williams, PhD, MCSP<sup>3</sup>, Sarah Lamb, MSc, MA, MCSP, DPhil<sup>4</sup>,  
David Rina, MD, PhD<sup>5</sup>, Stephen Gwilym, DPhil, FRCS (Orth)<sup>6</sup>



# Bevegelighet

Injury, Int. J. Care Injured 45 (2014) 540-545

Contents lists available at ScienceDirect

**Injury**

journal homepage: [www.elsevier.com/locate/injury](http://www.elsevier.com/locate/injury)

Critical time period for recovery of functional range of motion after surgical treatment of complex elbow instability: Prospective study on 76 patients

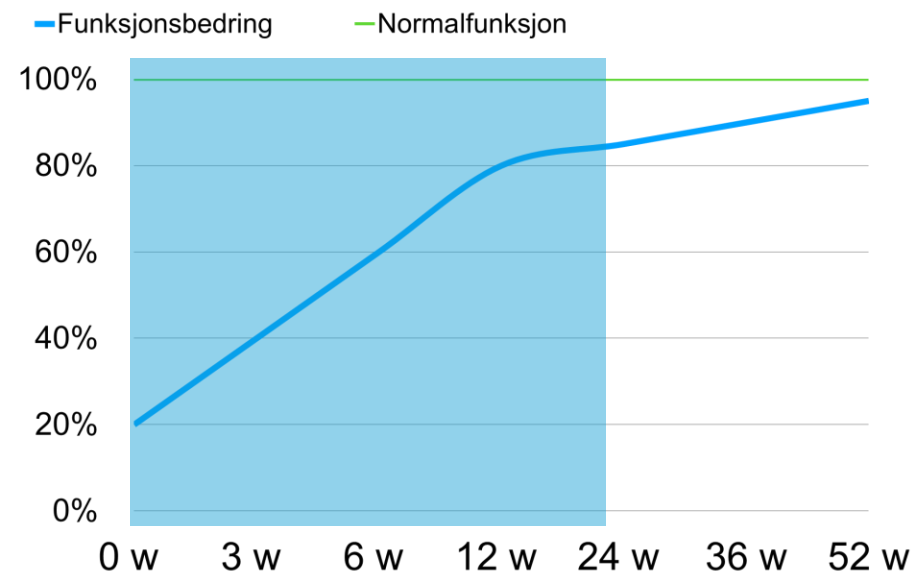
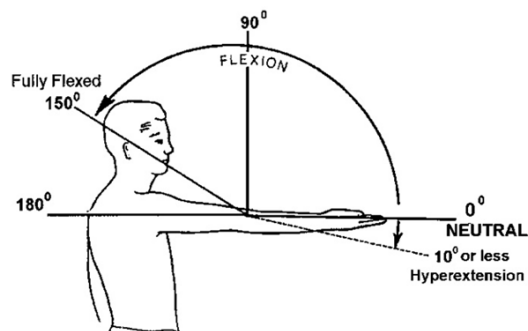
Giuseppe Giannicola  
Gianluca Cinotti  
Department of Orthopedic Surgery

CrossMark

**Cochrane Library**  
Cochrane Database of Systematic Reviews

**Early mobilisation for elbow fractures in adults (Review)**

Harding P, Rasekaba T, Smirneos L, Holland AE



# Bevegelighet



Hvilestillinger

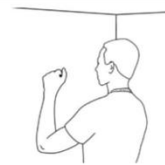
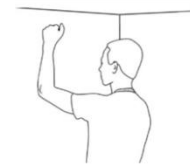
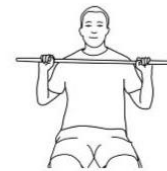


**DO'S**

KTAK



KTAK





# Nevroplastisitet

Kortikale endringer i korresponderende sensorisk og motorisk cortex

Økt afferent input:

Full kinetisk kjede

Bilaterale øvelser

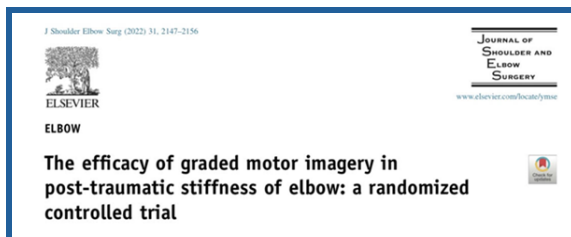
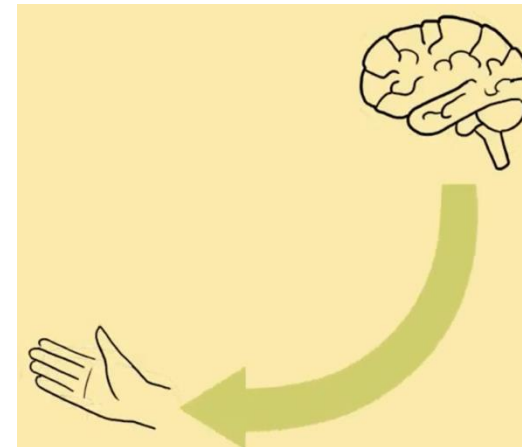
Øvelser i lukket kjede

Funksjonelle

Krevende øvelser

Imaginære øvelser

Speilterapi



# Dynamisk stabilisering

- Valgusstabilitet (MCL)

FCR, FCU, FDS, pronator teres

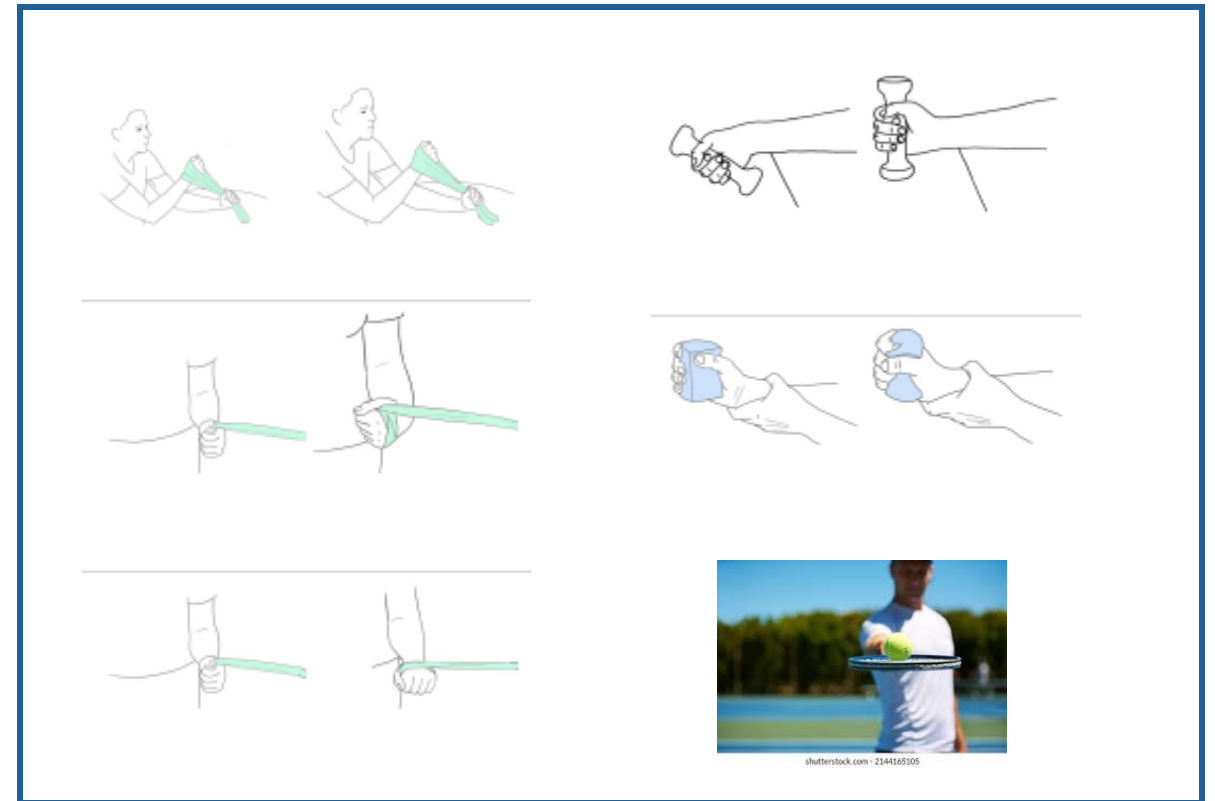
- Varusstabilitet (LCL)

ECR (l/b), ECU, supinator

(Grep)

Fleksorer og ekstensorer:

Økt artikulasjon, avlaster passive strukturer



# Passive øvelser

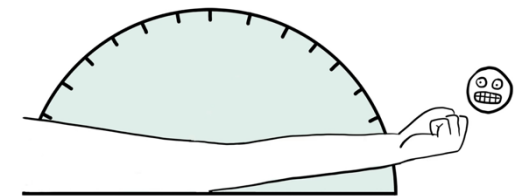
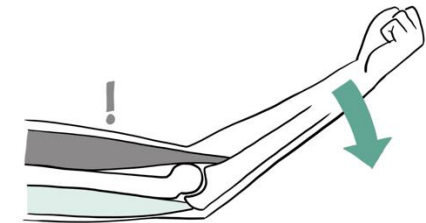
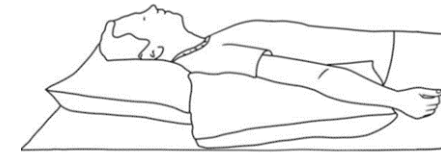
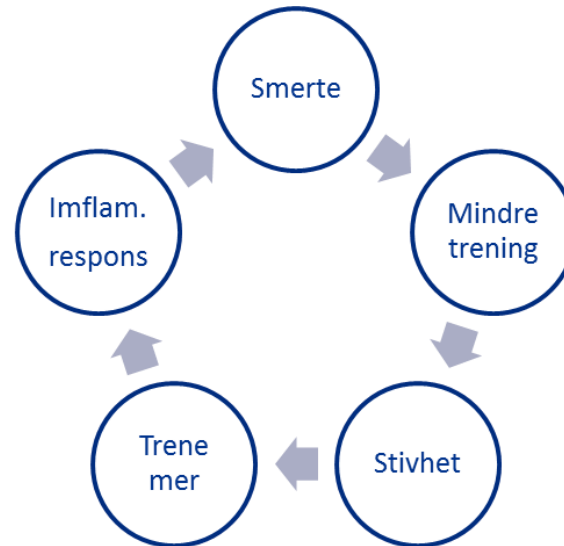
*Langvarige tøyninger med tyngdekraft*

TERT: total end range time

Avspenning

Lav belastning (1 kg)

Unngå økte symptomer

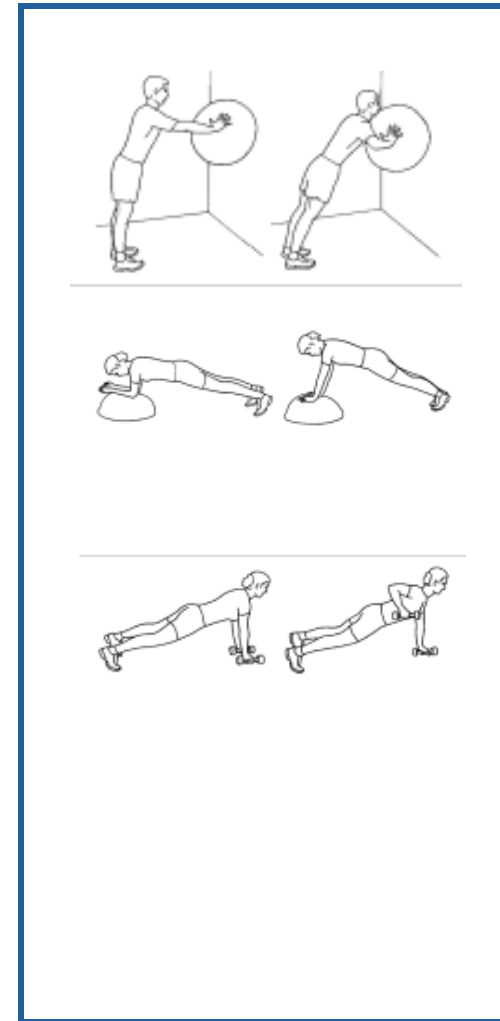
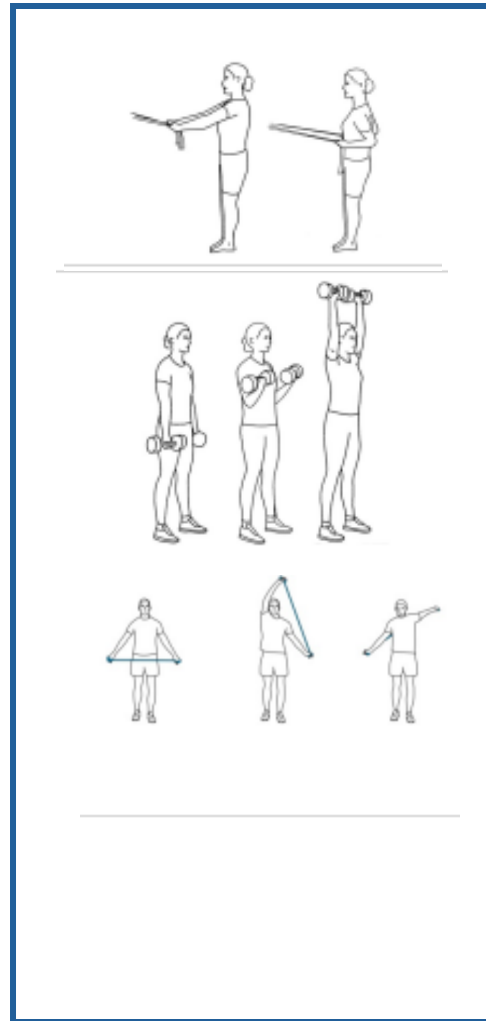




# 12 uker



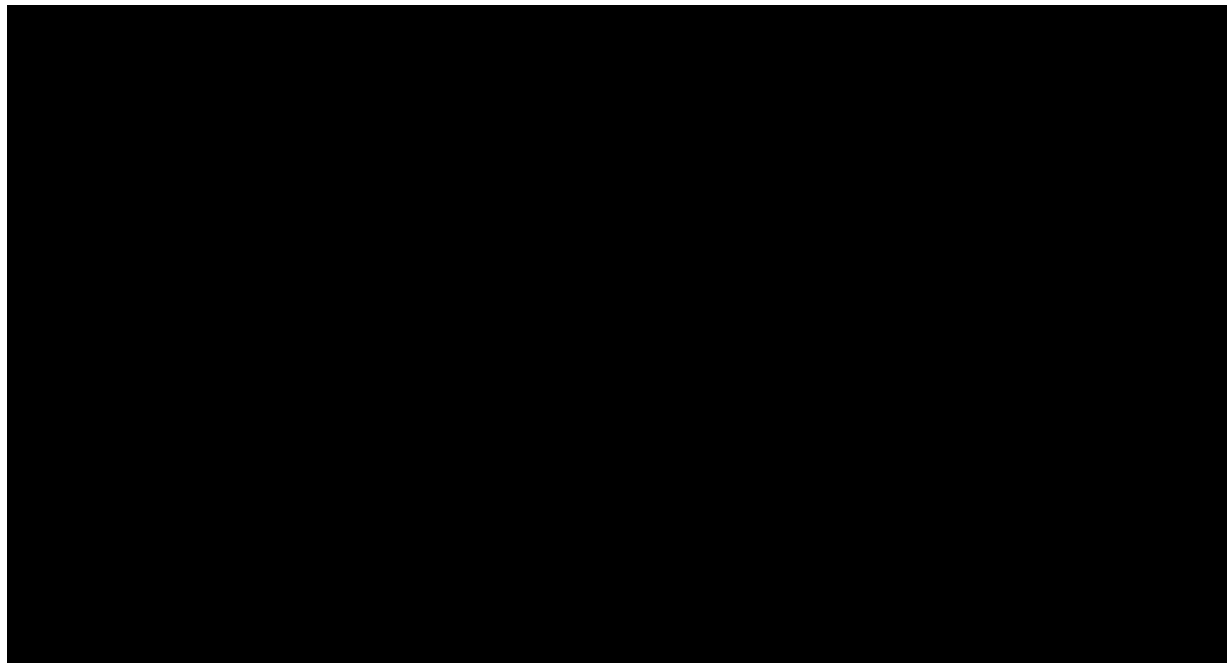
# Progresjon



5 mnd



# Tilbake til idrett





# Tilbake til idrett

- Proprioepsjon
- Styrke
- Avansere øvelser
  - På tvers av bevegelsesaksen
  - Sammensatte
  - Lukkede øyne
  - Ytterstilling
  - Variere hastighet
- Plyometrisk trening
- Idrettsspesifikt
- Mentalitet

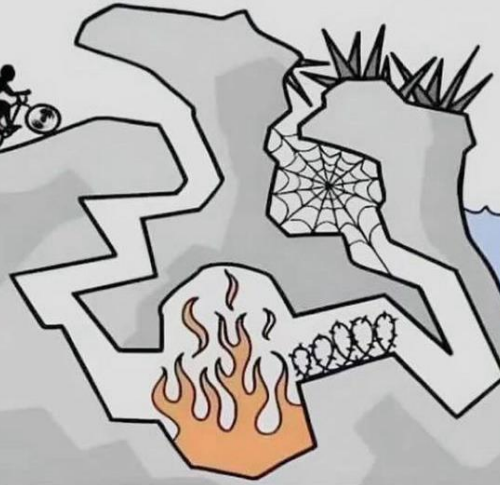


# Your plan

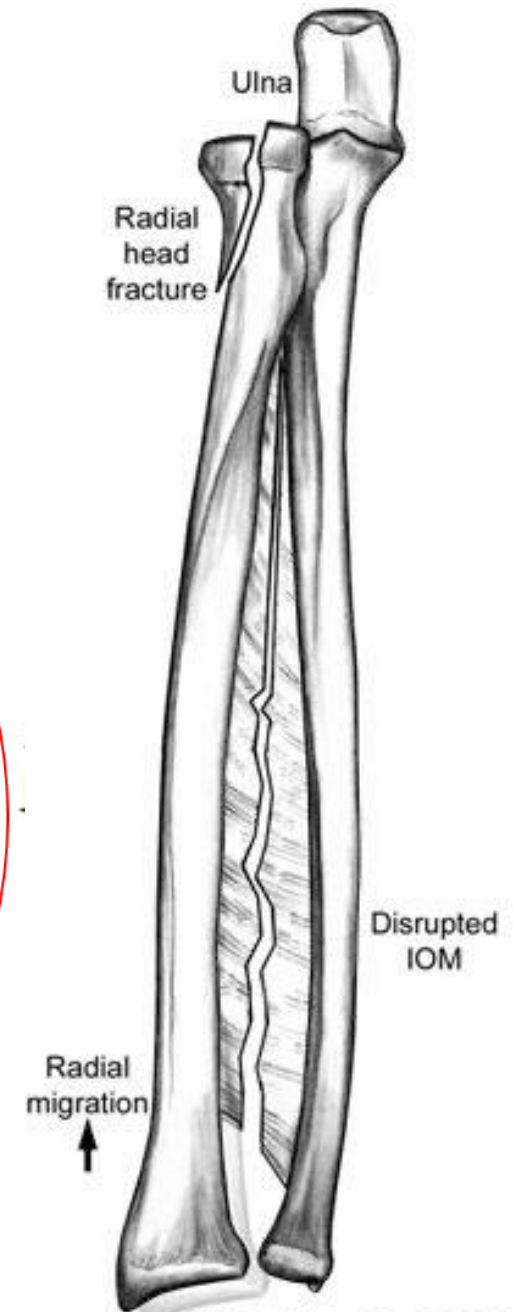
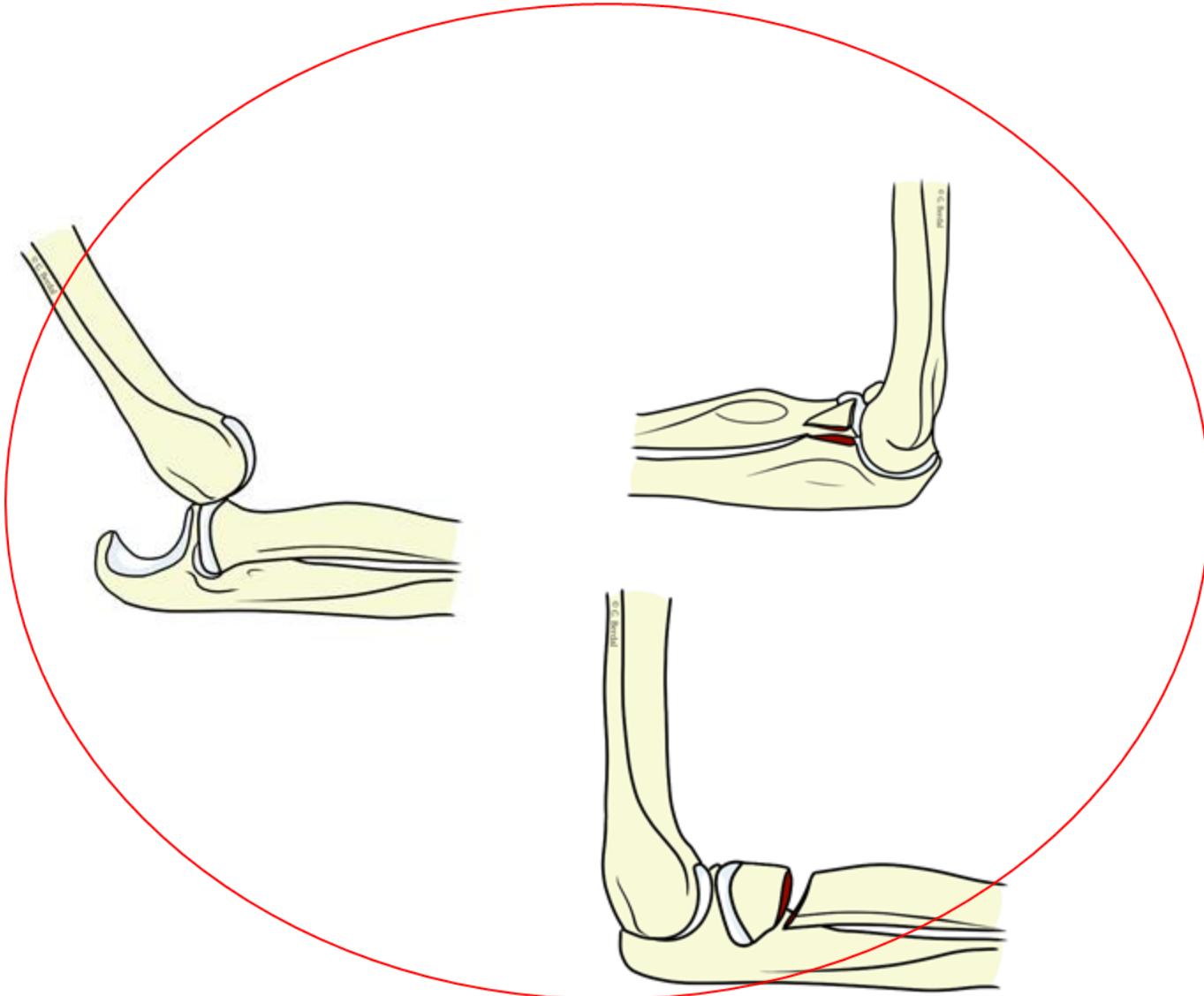


@successpictures

# Reality



# Albuefrakturer



Dislocation of the DRUJ

# Rehabilitering albuefrakturer

- 0-6 uker - 0,5 kg

AROM/PROM

Ligamentbesparende øvelser

- 6-12 uker – unngå tung belastning/maksbelastning

AROM/PROM

Stabilitet

Gradvis økende belastning

- Idrett 5-6 mnd

## Ligamentskade

\*Trygg fleksjon- og ekstensjonstrening: nøytral underarmsrotasjon

\*Trygg rotasjonstrening med albuefleksjon  $\geq 90^\circ$

\*Forsiktighetsreglene gjelder normalt første 6-8 ukene



# Pasientkasus 2





# Første møtet

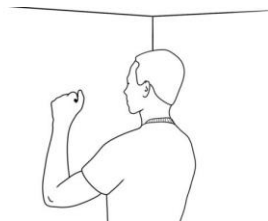
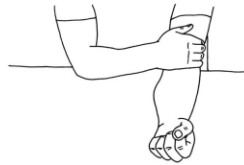
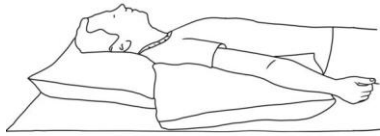




# 3 mnd

Albue: 15 – 130 grader, supinasjon 35 grader (passivt 70), pronasjon 60

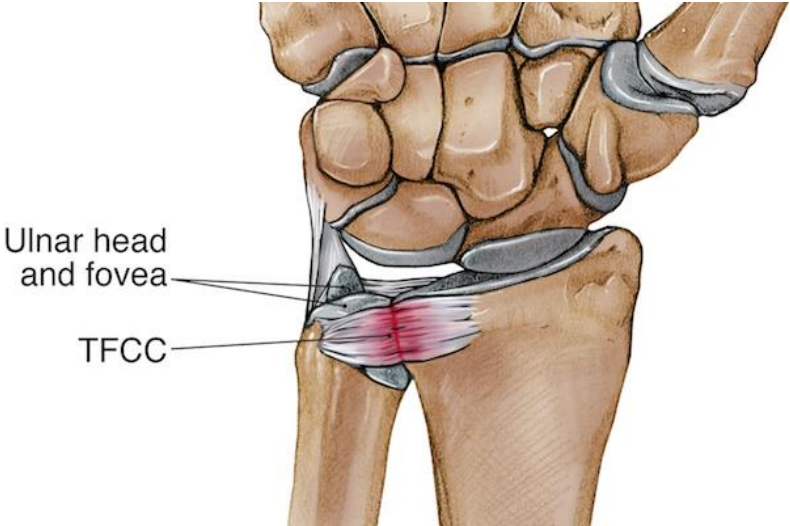
Håndledd og fingre tilnærmet sidelik



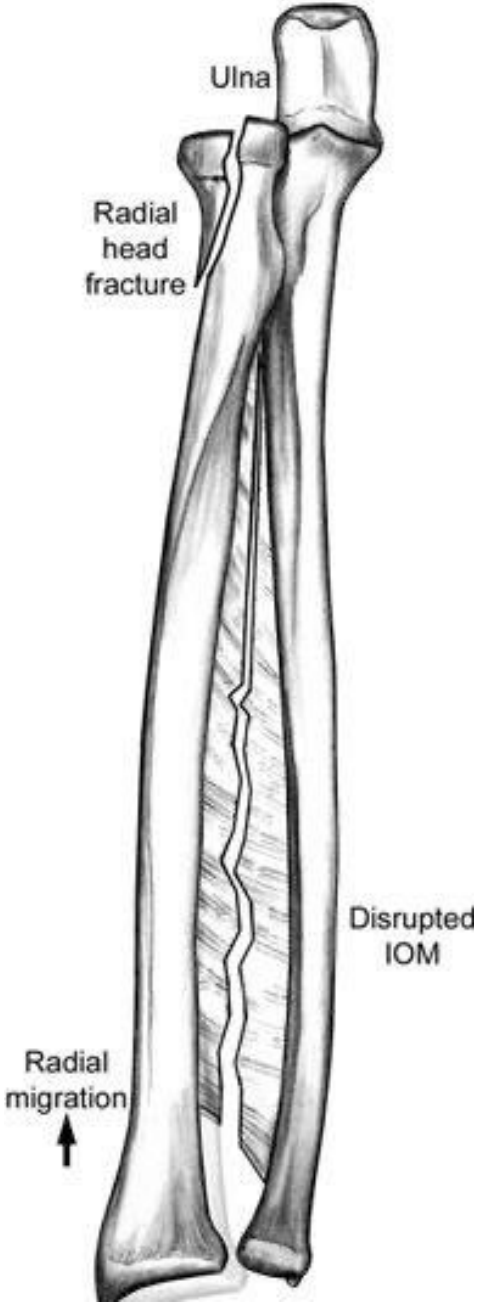
©Novofix Bimedica 2020

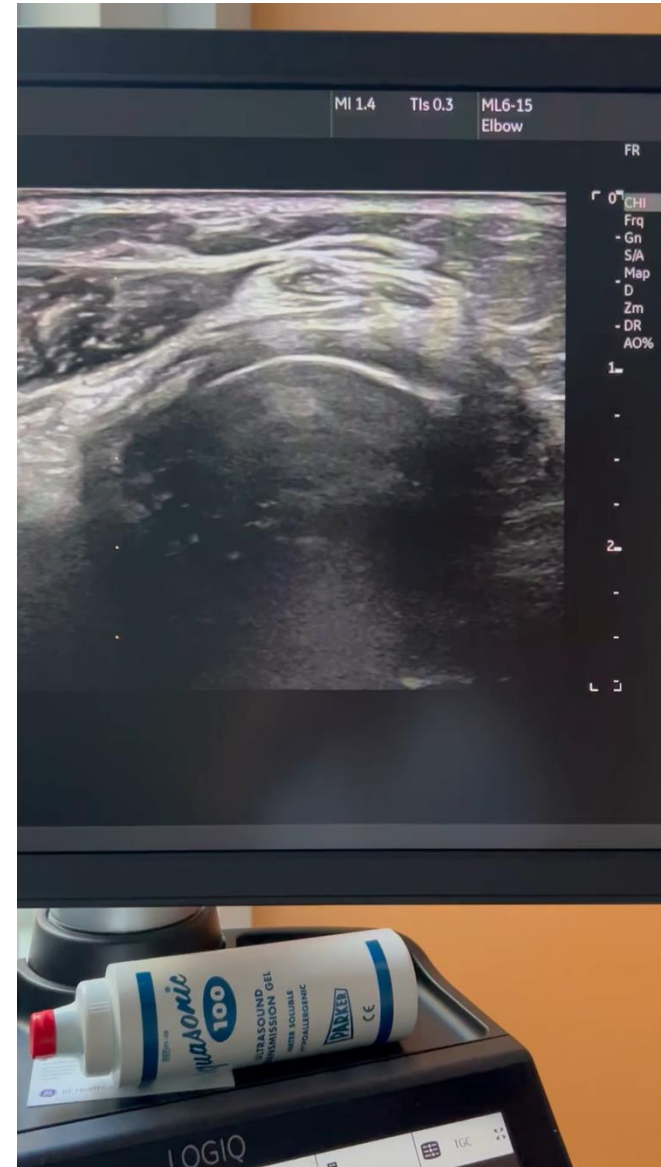
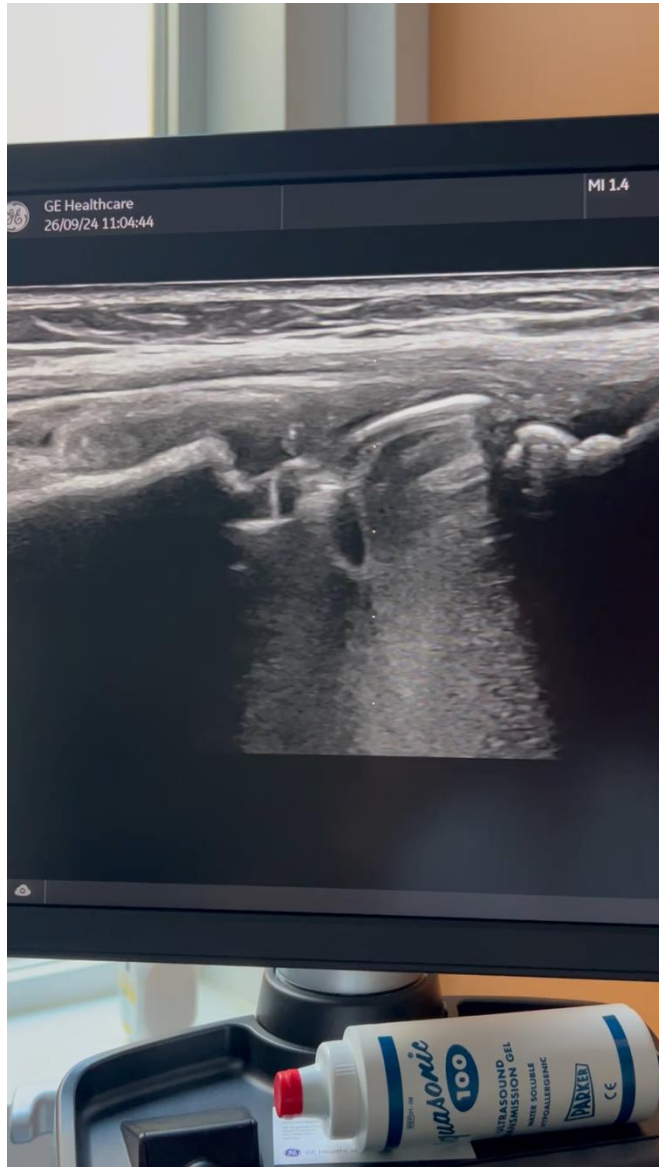


# 4 mnd: Forverring



©pathologies.lexmedicus.com







# Komplikasjoner

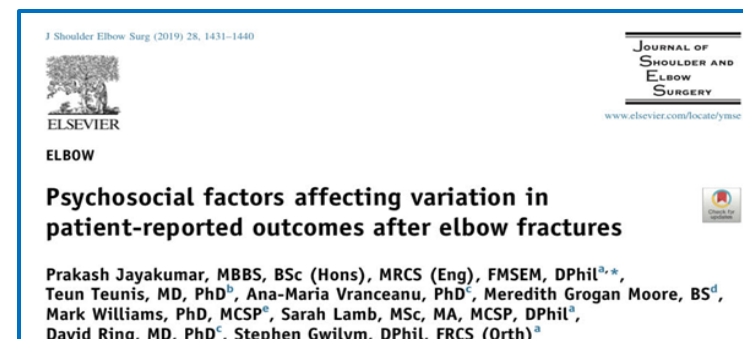
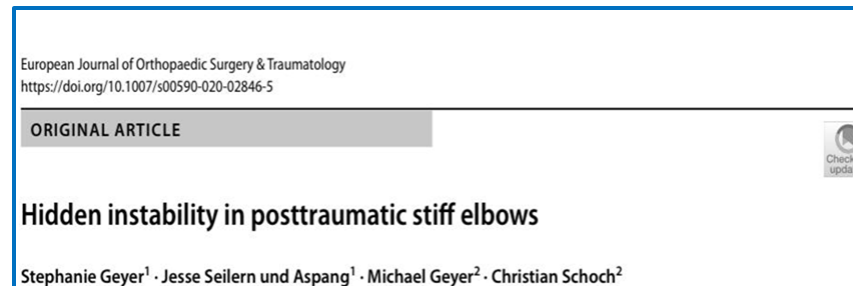
Kompenserende bevegelsesmønstre



# Den stive albuen

## Hvorfor stivhet?

- Mal-unions
- Loose bodies
- Osteofytter
- Synostose
- Heterotopisk ossifikasjon
- Bløtvevskontrakturer
  - Rask endring i kollagenfibre
  - Hyperaktivitet i fleksorgruppen
- Instabilitet
- Psykososiale faktorer



# Hva er albuestivhet?

- Morreys arc of motion
  - >30 - <120 grader?
  - Subjektivt!
- 
- Når skal de opereres?
  - Artrolyse (kapsulotomi):
    - Arthron (fra gresk): Ledd
    - Lysis (fra gresk): Oppløsning, spalting
  - Prognose?



©Vg.no

# Rehabilitering etter albueartrolyse

- 12 uker – lav belastning

AROM/PROM

(Ligamentbesparende øvelser)

Styrke med ROM fokus

- 12 uker →

AROM/PROM

(Stabilitet)

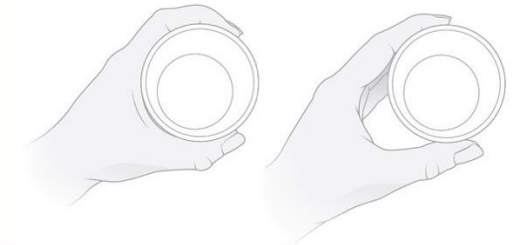
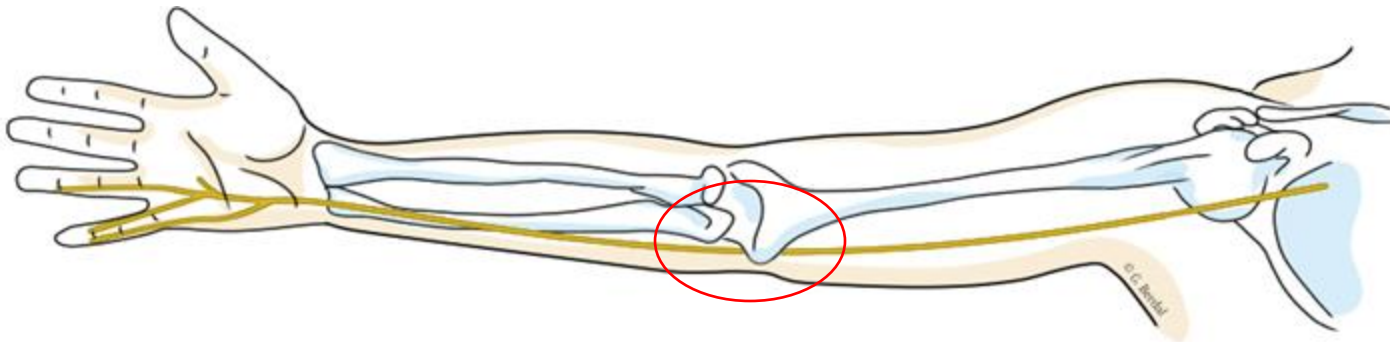
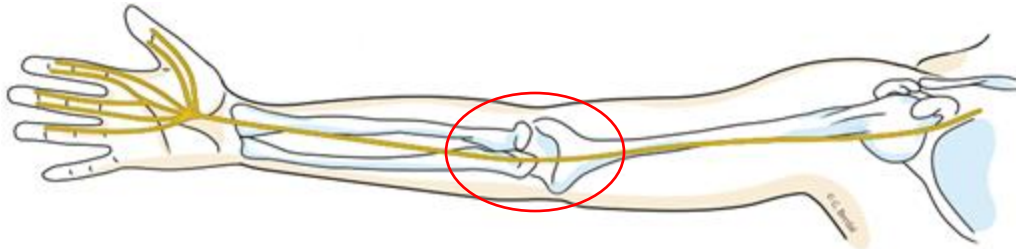
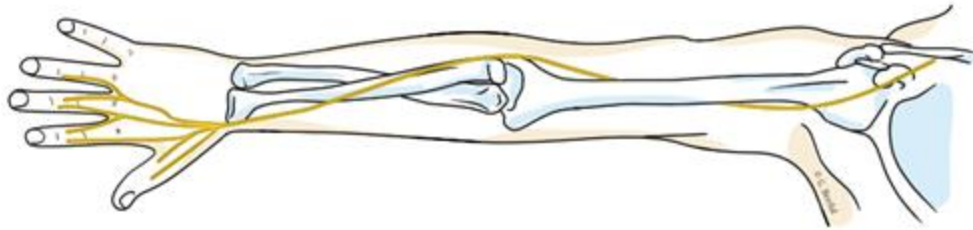
Gradvis økende belastning

- Idrett/maksbelastning 6 mnd (?)





# Nerveaffeksjon



Normal

Bottle sign



©amboss.com

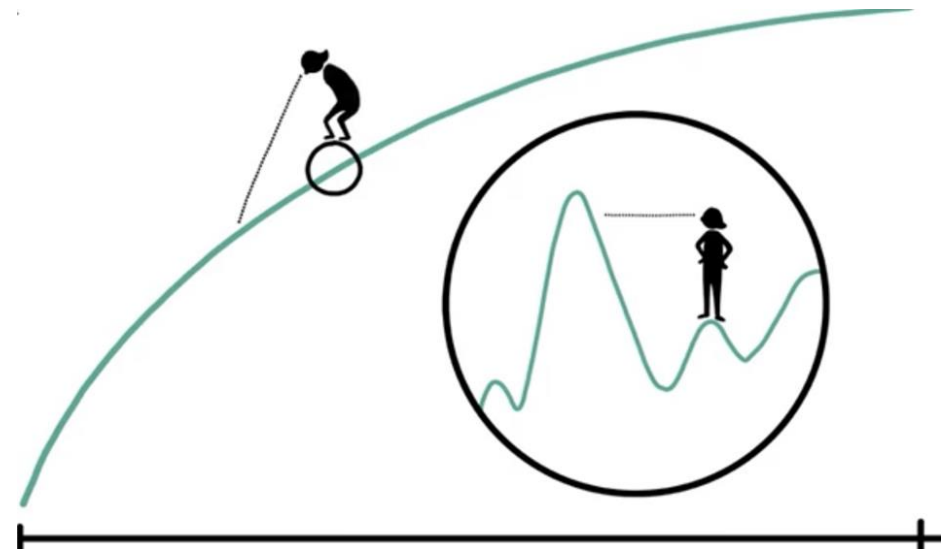
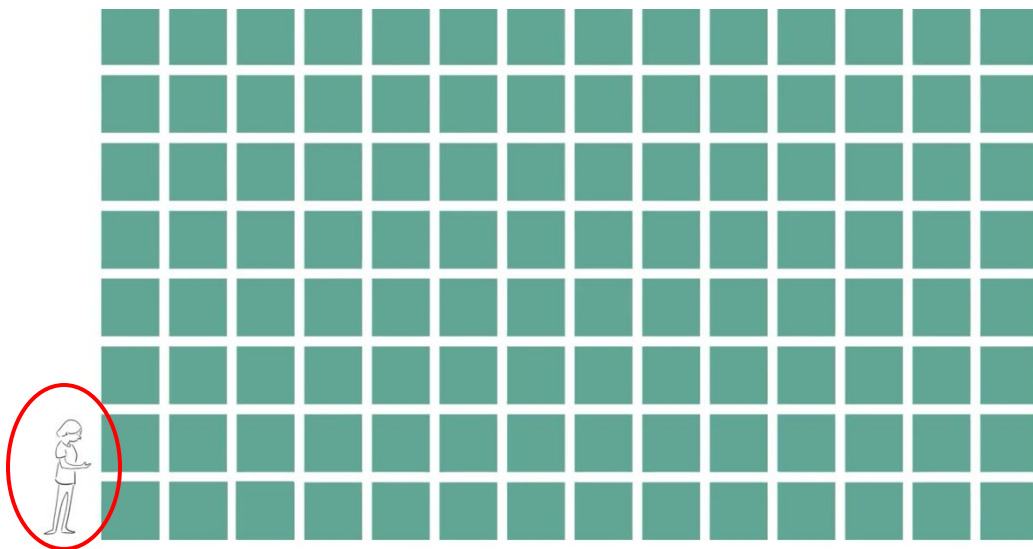


©Montessoritoddlers.no



# Motivasjon

6 – 12 måneder →



# Avslutningsvis

- Den gode samtalen: trygging og mestring.

- Bevegelighet



- Plastisitet, muskelaktivering og stabilitet

- Styrke har ingen utløpsdato!

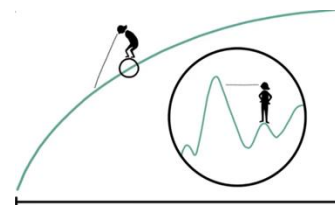


- Tidsperspektiv – motivasjon

- Hva skal pasienten tilbake til?



**DO'S**





Youtube:  
Smertebehandling etter operasjon



Youtube:  
Rehabilitering etter skader i albuen

[www.albue.no](http://www.albue.no)

 Nasjonal kompetansetjeneste for albuekirurgi

# Takk for oppmerksomheten!

