

## Supplementary article data

# Overtreatment of displaced midshaft clavicle fractures

## A survey of hospitals in Sweden, Denmark, and Finland

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### TREATMENT

The following section deals only with midshaft clavicle fractures dislocated by more than 1 bone width. Open fractures, vascular and neurological damage, floating shoulder and other conditions where there is absolute indication for surgical treatment is not included in this section.

1. Which primary treatment is offered?
  - o We recommend conservative treatment for virtually all. (n = 16)
  - o We recommend operative treatment, if additional specific criteria (radiological and/or patient factors) are met. (n = 66)
  - o We recommend operative treatment for virtually all. (n = 3)
  - o Other \_\_\_\_\_. (n = 0)
2. When conservative treatment is offered the following treatment is used:
  - o Simple sling (e.g. collar'n cuff). (n = 60)
  - o Figure-of-eight bandage. (n = 7)
  - o Individual assessment but either a simple sling or figure-of-eight bandage. (n = 18)
  - o Other \_\_\_\_\_. (n = 0)
3. When conservative treatment is chosen, which follow-up is offered: (please indicate by more than one tick if necessary)
  - o Clinical assessment, perhaps with x-ray, within 1 week. (n = 29)
  - o Clinical assessment with x-ray, after 10–14 days. (n = 23)
  - o Clinical assessment with x-ray, after 3 weeks. (n = 7)
  - o Clinical assessment with x-ray, after 6 weeks. (n = 8)
  - o Follow-up by general practitioner. (n = 12)
  - o Other \_\_\_\_\_. (n = 6)
4. Patients that persistently have pain after conservative treatment are offered surgery:
  - o 3–6 weeks after injury. (n=12)
  - o 6 weeks to 3 months after injury. (n = 19)
  - o 3–6 months after injury. (n = 31)
  - o 6–9 months after injury. (n = 12)
  - o > 9 months after injury. (n = 7)
  - o Other \_\_\_\_\_. (n = 4)
5. The following criteria need to be fulfilled for primary surgery to be offered (within 3 weeks from injury): (please indicate by more than one tick if necessary)
  - o Significant dislocation (> 1 bone width). (n = 9)
  - o 1 or more larger intermediary fragments. (n = 0)
  - o Significant shortening (> 20 mm). (n = 0)
  - o Combination of significant dislocation and 1 or more larger intermediary fragments. (n = 0)
  - o Combination of significant dislocation and shortening. (n = 14)
  - o Combination of significant dislocation, shortening, and 1 or more larger intermediary fragments. (n = 57)
  - o Other \_\_\_\_\_. (n = 5)

6. Is operative treatment offered in fractures with large angulation but with residual bony contact (regardless of no shortening)?
- o Yes. (n = 11)
  - o No. (n = 70)
  - o Other \_\_\_\_\_ . (n = 4)
7. Is patient comorbidity a contraindication for operative treatment?
- o If ASA  $\geq$  2. (n = 3)
  - o If ASA  $\geq$  3. (n = 41)
  - o If ASA  $\geq$  4. (n = 22)
  - o No, ASA-class/comorbidity is not a contraindication. (n = 14)
  - o Other \_\_\_\_\_ . (n = 5)
8. Is patient age a contraindication for operative treatment?
- o If the age  $\geq$  60 years. (n = 5)
  - o If the age  $\geq$  70 years. (n = 15)
  - o No, age is not a contraindication. (n = 60)
  - o Other \_\_\_\_\_ . (n = 5)
9. Is the fact that the patient smokes daily a contraindication for operative treatment?
- o Yes. (n = 20)
  - o No. (n = 60)
  - o Other \_\_\_\_\_ . (n = 5)
10. Is the fact that the patient has a large daily alcohol consumption (according to national recommendations) a contraindication for operative treatment?
- o Yes. (n = 54)
  - o No. (n = 26)
  - o Other \_\_\_\_\_ . (n = 5)
11. Who performs the operations?
- o The operations are in most cases performed by a specialist from the shoulder-elbow sector. (n = 29)
  - o The operations are in most cases performed by a specialist from the trauma sector. (n = 35)
  - o The operations are in most cases performed by a resident or a younger surgeon under supervision. (n = 12)
  - o The operations are in most cases performed independently by a resident or a younger surgeon. (n = 0)
  - o Other \_\_\_\_\_ . (n = 9)
12. If operation is performed, the following operative technique is used:
- o Reconstruction plates. (n = 7)
  - o Locking plates placed superiorly on the bone. (n = 64)
  - o Locking plates placed anteriorly on the bone. (n = 10)
  - o Intramedullary rod/nail. (n = 2)
  - o Other \_\_\_\_\_ (n = 2)

Figure 2. Segment of the purpose-made questionnaire concerning treatment (showing the number of hospitals with that specific answer).