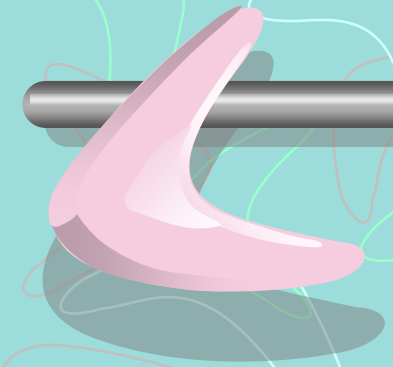
Evidence based medicine



Roman Totkovič

Open Medical Club Košice

Existujú malé klamstvá, veľké klamstvá a štatistika

W.Churchill

Stupnica dôležitosti a vedeckej váhy štúdie

- US-Agency for Health Care Policy and Research /1998/ : Acute pain management. Operative or medical procedures and trauma.
- A
- B
- C
- D

Stupnica dôležitosti a vedeckej váhy štúdie

A

- Ia: dôkazy na základe metaanalýzy randomizovaných, kontrolovaných štúdií
- Ib: dôkazy na základe minimálne jednej randomizovanej, kontrolovanej štúdie

Dostatočné dôkazy na odporučenie danej metódy alebo postupu

Stupnica dôležitosti a vedeckej váhy štúdie

B

- II a:dôkazy na základe najmenej jednej kontrolovanej nerandomizovanej štúdie s adekvátnym dizajnom
- II b: dôkazy na základe najmenej jednej dobre postavenej kvázi-experimentálnej štúdie

Dostatočné dôkazy na odporúčanie postupu

Stupnica dôležitosti a vedeckej váhy štúdie

C

Dôkazy na základe dobre koncipovanej, neexperimentálnej, deskriptívnej štúdie-ako napr. porovnávacia štúdia, korelačná štúdia a case-control study

Nedostatočné dôkazy na odporúčanie alebo zamietnutie daného postupu

Stupnica dôležitosti a vedeckej váhy štúdie

D

- Dôkazy na základe správy experta alebo jeho názoru alebo na základe klinickej skúsenosti renomovaných autorít /anerkante autoritaten, recognised authorities/

Cochrane library

- Unmanageable amounts of information
- We need systematic reviews
- Meta analysis and the use of statistical methods ...can provide more precise effects of healthcare
- Minimise bias and random errors in reviews

Cochrane library

- Guidelines to **help reviewers** to be systematic and explicit about the questions they pose
- These guidelines are **not substitute for good judgement**
- Focus is on systematic reviews of **randomised controlled trials /RCT/**

Sedem krokov v prípade review

- 1.Formulating the problem
- 2.Locating and selecting studies
- 3.Quality assessment of studies
- 4.Collecting data
- 5.Analysing and presenting studies
- 6.Interpreting results
- 7.Improving and updating reviews

Format of a cochrane review

1.cover sheet

- *Title*
- *Version*
- *Status*
- *Date edited*
- *Date of last substantive update*
- *Date next stage expected*
- *Contact reviewer*
- *Co reviewers*
- *Contributions*
- *Sources of support*
- *What is new in the field*

Formát review

2.Synopsis

3.Abstract

max. 400 slov:

- *Background*
- *Objectives*
- *Search strategy*
- *Selection criteria*
- *Data collection and analysis*
- *Main results*
- *Reviewers conclusions*

Formát review

4.text

Background

Objectives

Criteria for considering studies for this review

Search strategy for identification of studies

Methods of review

Description of studies

Methodological quality of studies

Results

Discussion

Reviewers conclusion

Formát review

5.acknowledgements

6.conflict of interest

7.references

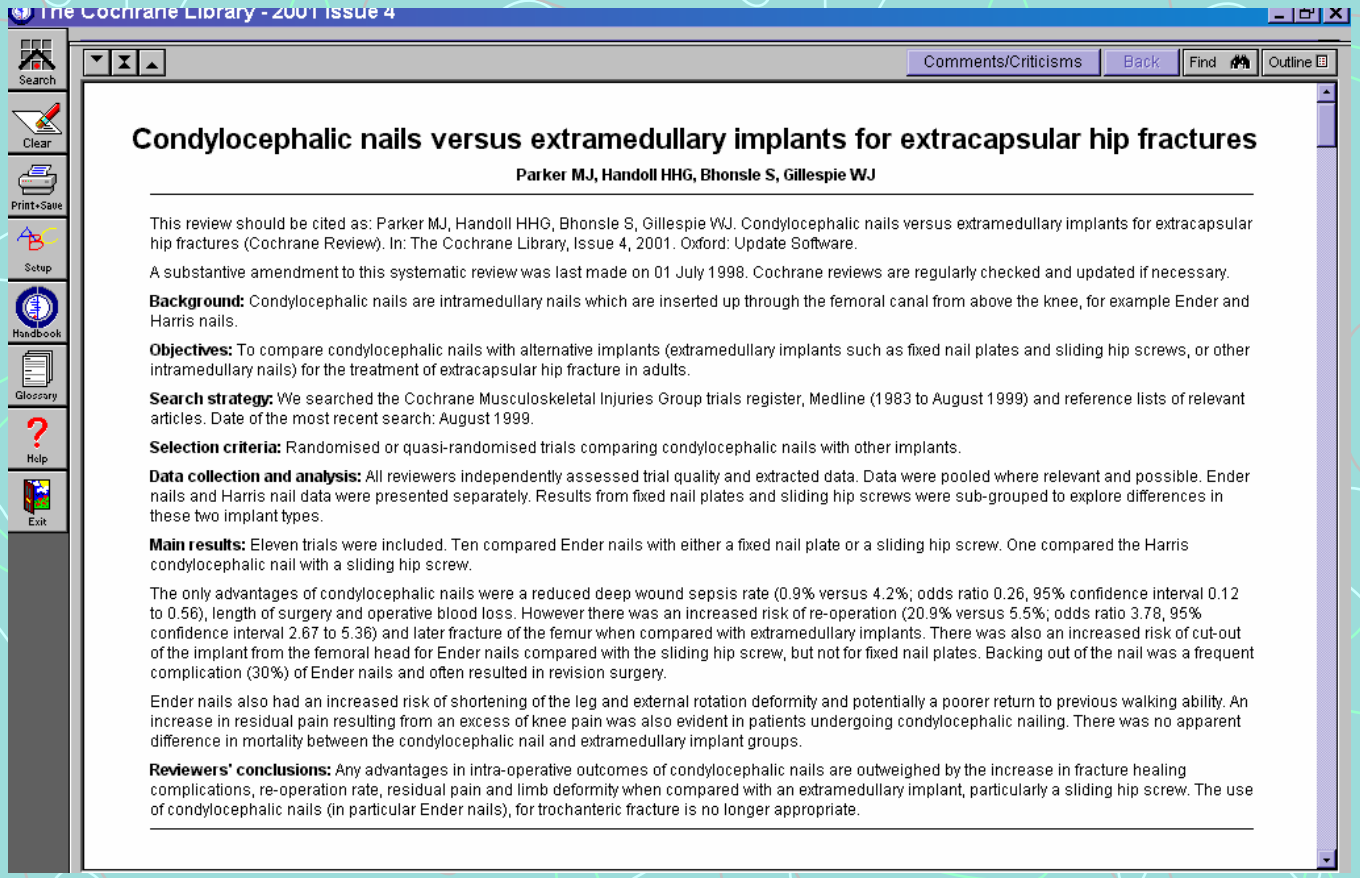
8.tables and figures

9.comments and criticism

10.elements of Cochrane protocols and reviews that should be published



- **The Cochrane Database of Systematic Reviews** (48 hits, 2191 total)
  - **Complete reviews** (36 hits, 1235 total)
    - Update Anti-spasticity agents for multiple sclerosis
    - Comment Antibiotic prophylaxis for surgery for proximal femoral and other closed long bone fractures
    - Arthroplasties (with and without bone cement) for proximal femoral fractures in adults
    - Botulinum toxin type A in the treatment of lower limb spasticity in cerebral palsy
    - New Closed suction surgical wound drainage after orthopaedic surgery
    - Co-ordinated multidisciplinary approaches for inpatient rehabilitation of older patients with...
    - Condylocephalic nails versus extramedullary implants for extracapsular hip fractures
    - Conservative interventions for treating distal radial fractures in adults
    - Dietary advice for illness-related malnutrition in adults
    - Elastic compression stockings for prevention of deep vein thrombosis
    - Electrical stimulation for preventing and treating post-stroke shoulder pain
    - Extramedullary fixation implants for extracapsular hip fractures
    - Gamma and other cephalocondylic intramedullary nails versus extramedullary implants for...
    - Heparin, low molecular weight heparin and physical methods for preventing deep vein thrombosis...
    - New Internal fixation implants for intracapsular proximal femoral fractures in adults
    - Comment Interventions for preventing ankle ligament injuries
    - Interventions for preventing lower limb soft-tissue injuries in runners
    - Interventions for shoulder pain
    - Interventions for treating calcaneal fractures
    - Interventions for treating hallux valgus (abductovalgus) and bunions
    - Interventions for treating plantar heel pain
    - Interventions for treating proximal humeral fractures in adults
    - Non-steroidal anti-inflammatory drugs for preventing heterotopic bone formation after hip...
    - Nutritional supplementation for hip fracture aftercare in the elderly
    - Orthotic devices for tennis elbow
    - Patient education for mechanical neck disorders
    - Physical medicine modalities for mechanical neck disorders
    - Pre-operative traction for fractures of the proximal femur
    - Single dose oral ibuprofen and diclofenac for postoperative pain
    - Surgery for lumbar disc prolapse
    - Surgical interventions for treating distal radial fractures in adults
    - Surgical treatment for meniscal injuries of the knee in adults
    - Telemedicine versus face to face patient care: effects on professional practice and health...
    - Thermotherapy for treating rheumatoid arthritis
    - Transcutaneous electrical nerve stimulation (TENS) for chronic pain


The Cochrane Library - 2001 Issue 4
Search
Clear
Print+Save
Setup
Handbook
Glossary
Help
Exit
Comments/Criticisms
Back
Find
Outline
Condylocephalic nails versus extramedullary implants for extracapsular hip fractures
Parker MJ, Handoll HHG, Bhonsle S, Gillespie WJ
This review should be cited as: Parker MJ, Handoll HHG, Bhonsle S, Gillespie WJ. Condylocephalic nails versus extramedullary implants for extracapsular hip fractures (Cochrane Review). In: The Cochrane Library, Issue 4, 2001. Oxford: Update Software.
A substantive amendment to this systematic review was last made on 01 July 1998. Cochrane reviews are regularly checked and updated if necessary.
Background: Condylocephalic nails are intramedullary nails which are inserted up through the femoral canal from above the knee, for example Ender and Harris nails.
Objectives: To compare condylocephalic nails with alternative implants (extramedullary implants such as fixed nail plates and sliding hip screws, or other intramedullary nails) for the treatment of extracapsular hip fracture in adults.
Search strategy: We searched the Cochrane Musculoskeletal Injuries Group trials register, Medline (1983 to August 1999) and reference lists of relevant articles. Date of the most recent search: August 1999.
Selection criteria: Randomised or quasi-randomised trials comparing condylocephalic nails with other implants.
Data collection and analysis: All reviewers independently assessed trial quality and extracted data. Data were pooled where relevant and possible. Ender nails and Harris nail data were presented separately. Results from fixed nail plates and sliding hip screws were sub-grouped to explore differences in these two implant types.
Main results: Eleven trials were included. Ten compared Ender nails with either a fixed nail plate or a sliding hip screw. One compared the Harris condylocephalic nail with a sliding hip screw.
The only advantages of condylocephalic nails were a reduced deep wound sepsis rate (0.9% versus 4.2%; odds ratio 0.26, 95% confidence interval 0.12 to 0.56), length of surgery and operative blood loss. However there was an increased risk of re-operation (20.9% versus 5.5%; odds ratio 3.78, 95% confidence interval 2.67 to 5.36) and later fracture of the femur when compared with extramedullary implants. There was also an increased risk of cut-out of the implant from the femoral head for Ender nails compared with the sliding hip screw, but not for fixed nail plates. Backing out of the nail was a frequent complication (30%) of Ender nails and often resulted in revision surgery.
Ender nails also had an increased risk of shortening of the leg and external rotation deformity and potentially a poorer return to previous walking ability. An increase in residual pain resulting from an excess of knee pain was also evident in patients undergoing condylocephalic nailing. There was no apparent difference in mortality between the condylocephalic nail and extramedullary implant groups.
Reviewers' conclusions: Any advantages in intra-operative outcomes of condylocephalic nails are outweighed by the increase in fracture healing complications, re-operation rate, residual pain and limb deformity when compared with an extramedullary implant, particularly a sliding hip screw. The use of condylocephalic nails (in particular Ender nails), for trochanteric fracture is no longer appropriate.

Čo sa dokázalo v ortopédii 36 štúdií /0.02% všetkých štúdií/

- Antibiotická profylaxia pri vnútornej fixácii zatvorených zlomenín je odôvodnená.
- Kondylocefalická intramedulárna osteosyntéza /Enderove prúty/ nie je vhodná na zlomeniny proximálneho femoru
- Elastická kompresívna bandáž znižuje riziko hlbokej žilovej trombózyLMWH sú efektívne v prevencii hžt
- Ortézy členka robia prevenciu opakovaných podvtnutí členka u športovcov

- NSA sú efektívne v prevencii heterotopických osfikácií pri tep
- Preoperatívna trakcia pri zlomeninách proximálneho femoru nie je efektívna
- Jedna dávka ibuprofenu alebo diklofenaku zmierňuje pooperačnú bolesť
- Redonova drenáž nie je indikovaná pri elektívnych ortop.výkonoch
- Chirurgická diskektómia u pacientov s prolapsom disku /selektívnej skupine/ vedie k rýchlejšej úľave bolestí než konzervatívna terapia, výsledky z dlhodobého hľadiska nie sú jednoznačné

Kedysi bola medicína lacná , neúčinná a bezpečná, dnes je účinná, drahá a nebezpečná

P.Gallinaro