



ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8-11

Operative Management of Anterior Shoulder Dislocations Leads to Reduced Recurrence in Paediatric Patients: A systematic review and meta-analysis

Annalise Abbott, MD MSc

Jarrett Moore, MD MSc

Lisa Phillips, MD

UNIVERSITY OF CALGARY, CANADA



Faculty Disclosure Information

- Nothing to disclose



ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8–11



BACKGROUND

- Paediatric patients are at high risk of recurrent instability after anterior shoulder dislocations
- Growing evidence to support primary operative management in first time dislocations

PURPOSE: *evaluate the risk of recurrent instability following operative versus non-operative management of anterior shoulder dislocations in paediatric patients*

- Subgroup analysis of first time dislocations



ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8-11



METHODS

Study Design: Systematic review and meta-analysis

Databases: PubMed, Embase, Medline, and Cochrane databases.

Search terms: paediatric, adolescent, shoulder, glenohumeral, dislocation, management, and recurrence. Abstract, title screening, and full text review was performed in tandem by two independent reviewers

- **Inclusion Criteria:** ≤ 18 years of age, traumatic mechanism, and anterior shoulder instability.
- **Exclusion criteria:** > 18 years of age, multidirectional instability, bony Bankart injury requiring fixation, and posterior instability.



ISAKOS
CONGRESS
2025

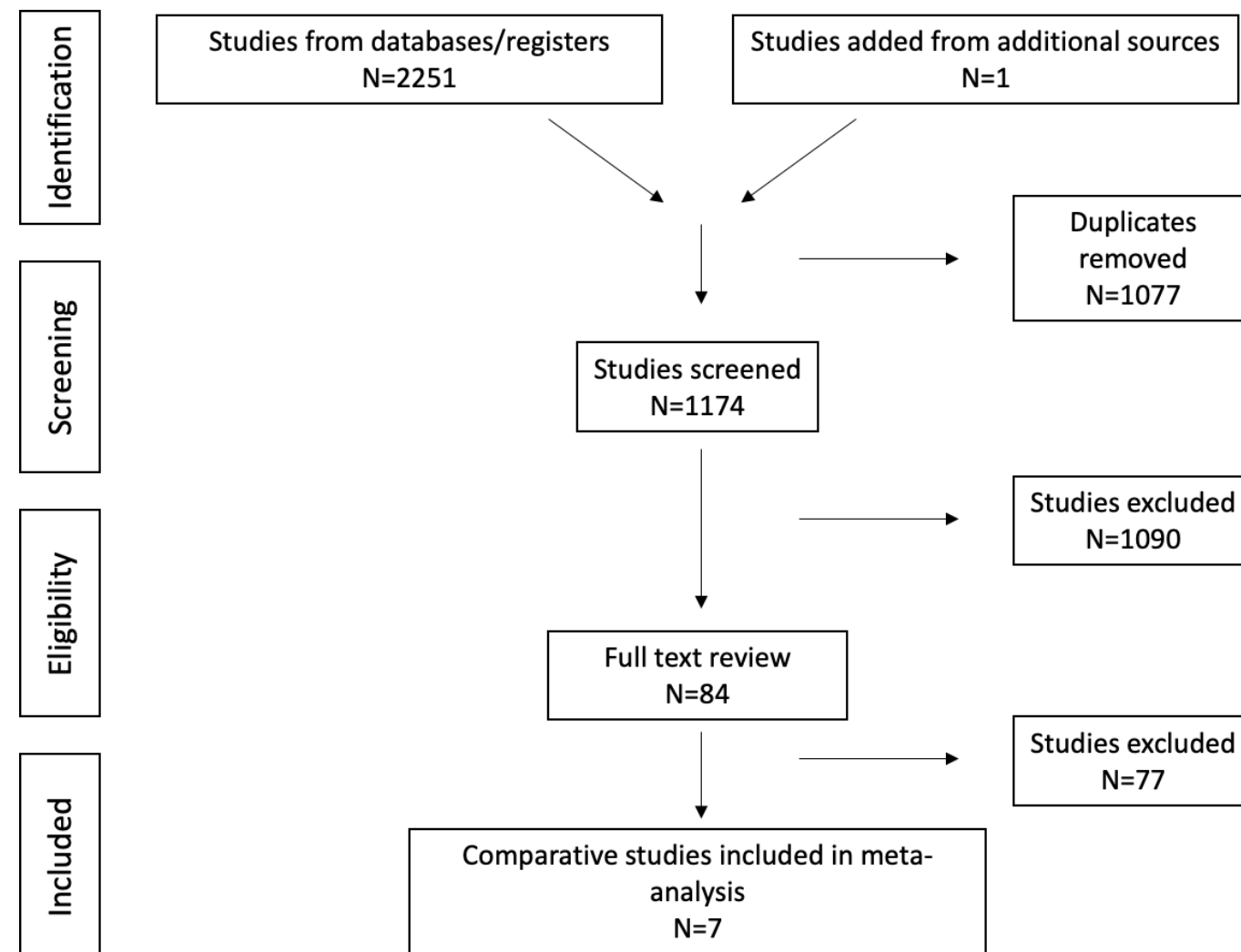


MUNICH
GERMANY
June 8-11

RESULTS

Seven studies included

- N=368
 - 273 males, 102 females
 - Median age 15.2



ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8–11

RESULTS

| First Author, yr | Patients (Shoulders), n | Mean Age, yr | Male, n (%) | Arthroscopic Bankart , n | Open Bankart, n | Arthroscopic Bankart in First Time Dislocator, n | Non-Op, n | Recurrent Instability Op, n (%) | Recurrent Instability Non-Op, n (%) | Mean FU, yr |
|-------------------|-------------------------|--------------------|-------------|--------------------------|-----------------|--|-----------|---------------------------------|-------------------------------------|-------------|
| Cordischi, 2009 | 14 | 12 | 2 (14.3) | 3 | 1 | 0 | 11 | 0 (0) | 3 (27.3) | 3.4 |
| Deitch, 2003 | 32 | 15.3 | 25 (78.1) | 16 | 0 | 0 | 16 | 5 (31.3) | 23 (71.9) | NS |
| Gigis, 2014 | 65 | 16.7 | 41 (63.1) | 38 | 0 | 38 | 27 | 5 (13.2) ^b | 19 (70.4) | NS |
| Khan, 2014 | 49 (53) | 10-16 ^a | 35 (71.4) | 28 | 0 | 0 | 25 | 2 (7.1) | 14 (56.0) | 8.2 |
| Postacchini, 2000 | 21 | 16 | 23 (76.1) | 5 | 0 | 5 | 21 | 0 (0) ^b | 18 (85.7) | 7.1 |
| Roberts, 2015 | 133 | 16.3 | 115 (86.4) | 60 | 30 | 0 | 115 | 19 (31.7) | 102 (88.7) | 7.9 |
| Lampert, 2003 | 54 | 14.5 | 32 (59.3) | 14 | 0 | 14 | 40 | 2 (14.3) ^b | 27 (67.5) | NS |

^aOnly range data available

^bDenotes outcomes for first time dislocator

Yr: year, op: operative, FU: follow-up



ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8-11

RESULTS

Risk of recurrence:

- Non-operative: 0.67 (0.56-0.89)
- Operative: 0.14 (0-0.32)

Significant difference in risk of recurrence between operative and non-operative management

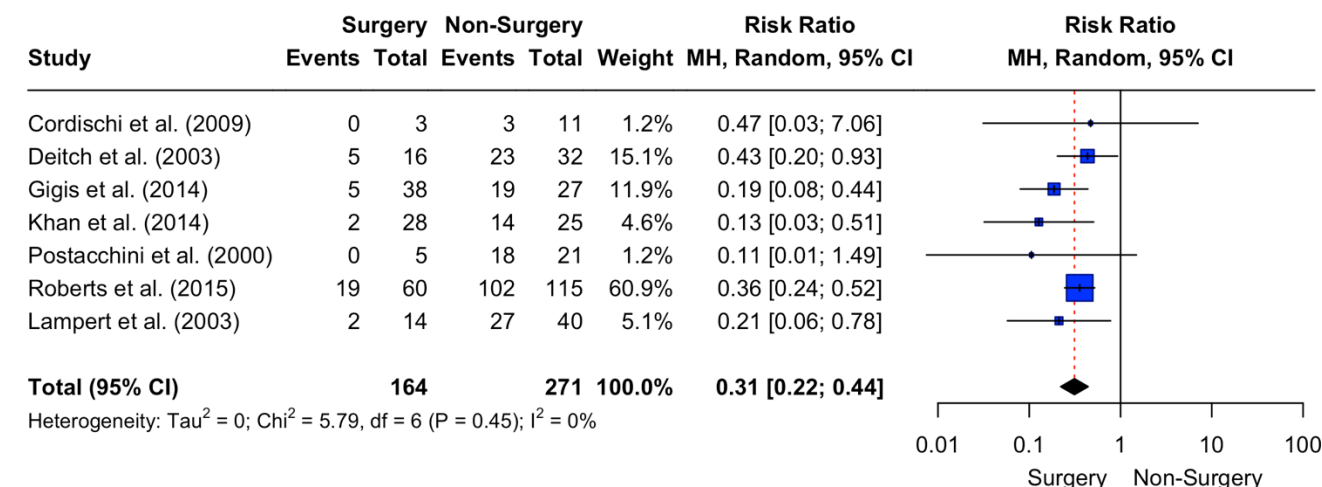


Fig 2. Comparison of risk ratio for operative vs non-operative management of anterior shoulder instability

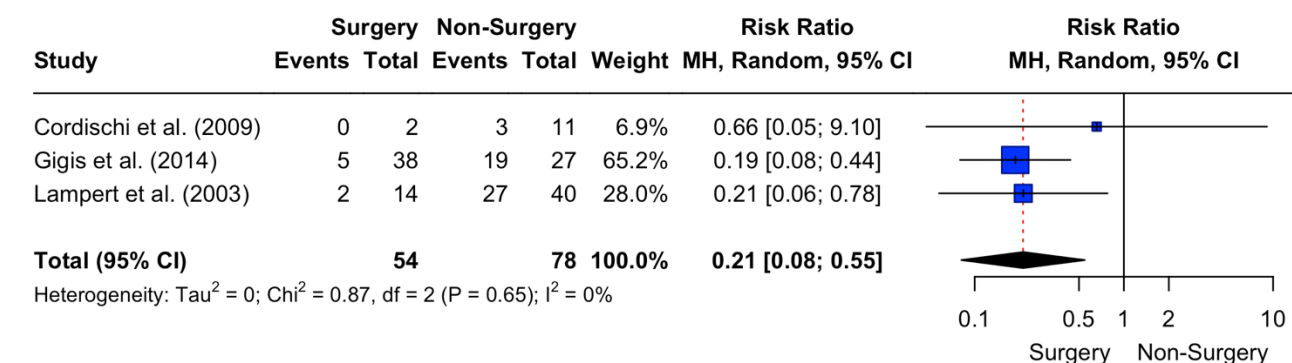


Fig 3. Comparison of risk ratio for operative vs non-operative management in first time dislocations

CONCLUSIONS

High rates of recurrence in the paediatric population with non-operatively managed anterior shoulder dislocations

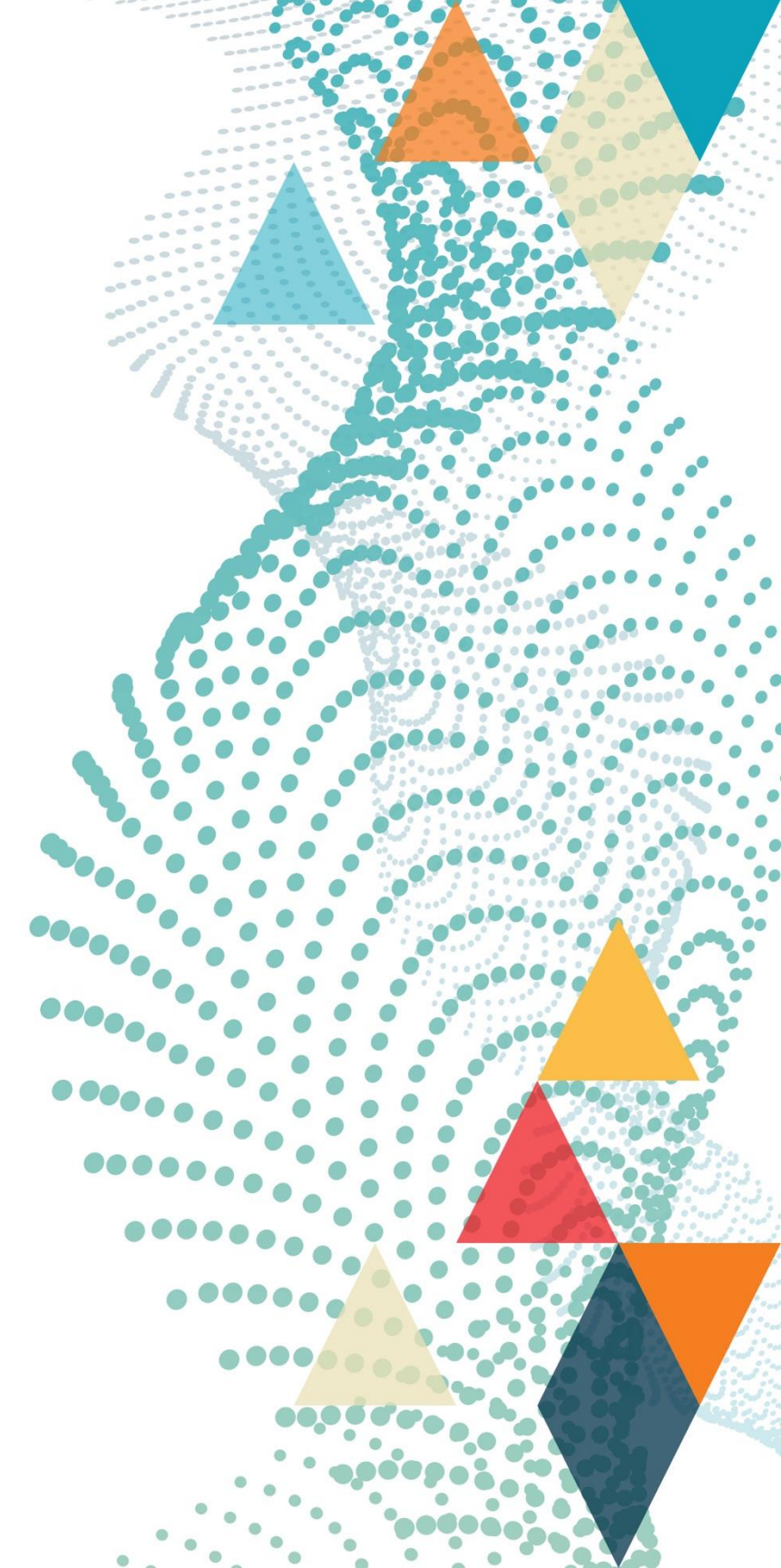
- Consider operative management in first time shoulder dislocations



ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8–11



REFERENCES

- Cordischi K, Li X, Busconi B. Intermediate outcomes after primary traumatic anterior shoulder dislocation in skeletally immature patients aged 10 to 13 years. *Orthopedics*. 2009;32(9):686.
- Deitch J, Mehlman CT, Foad SL, Obbehath A, Mallory M. Traumatic anterior shoulder dislocation in adolescents. *Am J Sports Med*. 2003;31(5):758–63.
- Gigis I, Heikenfeld R, Kapinas A, Listringhaus R, Godolias G. Arthroscopic versus conservative treatment of first anterior dislocation of the shoulder in adolescents. *J Pediatr Orthop*. 2014;34(4):421–5.
- Khan A, Samba A, Pereira B, Canavese F. Anterior dislocation of the shoulder in skeletally immature patients. *Bone Joint J*. 2014;96-B(3):354–9.
- Postacchini F, Gumina S, Cinotti G. Anterior shoulder dislocation in adolescents. 2000;33:470–4.
- Roberts SB, Beattie N, McNiven ND, Robinson CM. The natural history of primary anterior dislocation of the glenohumeral joint in adolescence. *Bone Jt J*. 2015;97-B(4):520–6.



ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8–11

