

A Systematic Review and Network Meta-Analysis of Manual Reduction Methods for Anterior Shoulder Dislocation

学位名	修士(公衆衛生学)
学位授与機関	聖路加国際大学
学位授与年度	2020
学位授与番号	32633公修専第066
URL	http://hdl.handle.net/10285/00016428

References

References marked with an asterisk indicate studies included in the systematic review and meta-analysis.

*Akcimen, M., & Bedel, C. (2020). Comparison between new modified external rotation method and external rotation method for reduction of ASD. *American Journal of Emergency Medicine*, 38(5), 874 – 878. <https://doi.org/10.1016/j.ajem.2019.07.001>

Alkaduhimi, H., van der Linde, J. A., Willigenburg, N. W., van Deurzen, D. F. P., & van den Bekerom, M. P. J. (2017). A systematic comparison of the closed shoulder reduction techniques. *Archives of Orthopaedic and Trauma Surgery*, 137(5), 589 – 599. <https://doi.org/10.1007/s00402-017-2648-4>

*Amar, E., Maman, E., Khashan, M., Kauffman, E., Rath, E., & Chechik, O. (2012). Milch versus Stimson technique for nonsedated reduction of anterior shoulder dislocation: A prospective randomized trial and analysis of factors affecting success. *Journal of Shoulder and Elbow Surgery*, 21(11), 1443 – 1449. <https://doi.org/10.1016/j.jse.2012.01.004>

*Beattie, T. F., Steedman, D. J., McGowan, A., & Robertson, C. E. (1986). A comparison of the Milch and Kocher techniques for acute anterior dislocation of the shoulder. *Injury*, 17(5), 349 – 352. [https://doi.org/10.1016/0020-1383\(86\)90161-0](https://doi.org/10.1016/0020-1383(86)90161-0)

Boss, A., Holzach, P., & Matter, P. (1993). A new self-repositioning technique for fresh, anterior-lower shoulder dislocation. *Helvetica Chirurgica Acta*, 60, 263 – 265.

Ceroni, D., Sadri, H., & Leuenberger, A. (1997). Anteroinferior shoulder dislocation: An auto-reduction method without analgesia. *Journal of Orthopaedic Trauma*, 11(6), 399 – 404. <https://doi.org/10.1097/00005131-199708000-00003>

Chaimani, A., Higgins, J. P. T., Mavridis, D., Spyridonos, P., & Salanti, G. (2013). Graphical tools for network meta-analysis in STATA. *PLoS ONE*, 8(10). <https://doi.org/10.1371/journal.pone.0076654>

Cunningham, N. (2003). A new drug free technique for reducing anterior shoulder dislocations. *Emergency Medicine*, 15(5–6), 521 – 524. <https://doi.org/10.1046/j.1442-2026.2003.00512.x>

*de Almeida, F. I. A. de, Leitão IC da, S., de Castro, L., & Pires, N. P. J. (2006). Luxação glenoumeral anterior aguda: Estudo comparativo entre métodos de redução incruenta/ Acute anterior glenohumeral dislocation: Comparative study between methods of bloodless reduction. *Revista Brasileira de Ortopedia*, 41(11/12), 455 – 460. https://cdn.publisher.gn1.link/rbo.org.br/pdf/41-10/2006_nov_04.pdf

Dong, H., Jenner, E. A., & Theivendran, K. (2020). Closed reduction techniques for acute anterior shoulder dislocation: A systematic review and meta-analysis. *European Journal of Trauma and Emergency Surgery* .[Advanced online publication] <https://doi.org/10.1007/s00068-020-01427-9>

Dudkiewicz, I., Arzi, H., Salai, M., Heim, M., & Pritsch, M. (2010). Patients education of a self-reduction technique for anterior glenohumeral dislocation of shoulder. *The Journal of Trauma*, 68(3), 620 – 623. <https://doi.org/10.1097/TA.0b013e318197ba95>

Eachempati, K. K., Dua, A., Malhotra, R., Bhan, S., & Bera, J. R. (2004). The external rotation method for reduction of acute anterior dislocations and fracture-dislocations of the shoulder. *The Journal of Bone and Joint Surgery. American Volume*, 86(11), 2431–2434. <https://doi.org/10.2106/00004623-200411000-00011>

*Fang, J., Zhang, F.-Q., Wu, S.-F., Lu, C.-W., Mo, Y.-Z., Luo, G.-F., Tan, Z.-E., Wu, Y.-H., & Wei, R.-J. (2013). Manipulation of superduct, adduction, rotation for the treatment of shoulder dislocation. *Zhongguo gu shang = China Journal of Orthopaedics and Traumatology*, 26(1), 16 – 18.

*Ghane, M.-R., Hoseini, S.-H., Javadzadeh, H.-R., Mahmoudi, S., & Saburi, A. (2014). Comparison between traction-countertraction and modified scapular manipulation for reduction of shoulder dislocation. *Chinese Journal of Traumatology*, 17(2), 93 – 98. <https://doi.org/10.3760/cma.j.issn.1008-1275.2014.02.007>

Gleeson, A. P. (1998). Anterior glenohumeral dislocations: What to do and how to do it. *Emergency Medicine Journal*, 15(1), 7 – 12. <https://doi.org/10.1136/emj.15.1.7>

- Gonai, S., Kamio, Y., Matsuoka, T., Harunari, M., Saito, Y., & Takuma, K. (2016). A new autoreduction method for anterior shoulder dislocation: The GONAI method. *American Journal of Emergency Medicine*, 34(1). <https://doi.org/10.1016/j.ajem.2015.05.053>
- Gottlieb, M. (2020). Shoulder dislocations in the emergency department: A comprehensive review of reduction techniques. *Journal of Emergency Medicine*, 58(4), 647 – 666. <https://doi.org/10.1016/j.jemermed.2019.11.031>
- Higgins, P., Savovic, H., Page, M., & Sterne, J. (2019). Revised Cochrane risk-of-bias tool for randomized trials (RoB 2) short version (CRIBSHEET). *RoB 2.0 Development Group*, 366(August), 14898.
- Hovellius, L. (1982). Incidence of shoulder dislocation in Sweden. *Clinical Orthopaedics and Related Research*, 166, 127 – 131. <https://doi.org/10.1097/00003086-198206000-00021>
- Iwaso, H., & Tamai, K. (2010). Reduction techniques and conservative treatment for first-time shoulder dislocation. *Journal of Joint Surgery*, 29(11), 1241 – 1244.
- Janecki, C. J., & Shahcheragh, G. H. (1982). The forward elevation maneuver for reduction of anterior dislocations of the shoulder. *Clinical Orthopaedics and Related Research*, 164, 177 – 180.
- Kothari, R. U., & Dronen, S. C. (1990). The scapular manipulation technique for the reduction of acute anterior shoulder dislocations. *Journal of Emergency Medicine*, 8(5), 625 – 628. [https://doi.org/10.1016/0736-4679\(90\)90460-D](https://doi.org/10.1016/0736-4679(90)90460-D)

Krøner, K., Lind, T., & Jensen, J. (1989). The epidemiology of shoulder dislocations.

Archives of Orthopaedic and Trauma Surgery, 108(5), 288 – 290.

<https://doi.org/10.1007/BF00932317>

Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A.,

Clarke, M., Devereaux, P. J., Kleijnen, J., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration. *PLoS Medicine*, 6(7).

<https://doi.org/10.1371/journal.pmed.1000100>

*Maity, A., Roy, D. S., & Mondal, B. C. (2012). A prospective randomised clinical trial

comparing FARES method with the Eachempati external rotation method for reduction of acute anterior dislocation of shoulder. *Injury*, 43(7), 1066 – 1070.

<https://doi.org/10.1016/j.injury.2012.01.019>

Manes, H. R. (1980). A new method of shoulder reduction in the elderly. *Clinical*

Orthopaedics and Related Research, Mar-Apr (147), 200 – 202.

<https://doi.org/10.1097/00003086-198003000-00035>

*Marcano-Fernández, F. A., Balaguer-Castro, M., Fillat-Gomà, F., Ràfols-Perramon, O.,

Torrens, C., & Torner, P. (2018). Teaching patients how to reduce a shoulder

dislocation: A randomized clinical trial comparing the Boss-Holzach-Matter self-assisted

- technique and the Spaso method. *The Journal of Bone and Joint Surgery. American Volume*, 100(5), 375 – 380. <https://doi.org/10.2106/JBJS.17.00687>
- Mattick, A., & Wyatt, J. P. (2000). From Hippocrates to the Eskimo--a history of techniques used to reduce anterior dislocation of the shoulder. *Journal of the Royal College of Surgeons of Edinburgh*, 45, 312 – 316.
- Nakitende, D. N., Sundaram, T., & Gottlieb, M. (2018). Shoulder joint dislocation reduction. In *Reichman's Emergency Medicine Procedures*, (3rd Ed). McGraw Hill.
- Onyeka, W. (2002). Anterior shoulder dislocation: An unusual complication. *Emergency Medicine Journal*, 19(4), 367 – 368. <https://doi.org/10.1136/emj.19.4.367>
- Pimpalnerkar, A., Datta, A., Longhino, D., & Mohtadi, N. (2004). An unusual complication of Kocher's manoeuvre. *British Medical Journal*, 329(7480), 1472 – 1473. <https://doi.org/10.1136/bmj.329.7480.1472>
- Puha, B., Gheorghevici, T. S., Veliceasa, B., Popescu, D., & Alexa, O. (2016). Classic versus novel in reduction of acute anterior dislocation of the shoulder: A comparison of four reduction techniques. *Revista Medico-Chirurgicala a Societatii de Medici Si Naturalisti Din Iasi*, 120(2), 311 – 315.
- Reichman, E. F., Nakitende, D. N., Sundaram, T., & Gottlieb, M. (2018). Shoulder joint dislocation reduction. In *Reichman's Emergency Medicine Procedures*, (3rd Ed.) McGraw Hill.

*Rezende, B. da R. M., de Almeida, J. I. S., de Sousa, U. J., Bomfim, L. de S., & Ferreira, M.

S. J. (2015). Glenoumeral dislocation: A prospective randomized study comparing spazo and kocher maneuvers. *Acta Ortopedica Brasileira*, 23(4), 192 – 196.

<https://doi.org/10.1590/1413-78522015230400701>

*Şahin, N., Öztürk, A., Özkan, Y., Atici, T., & Özkaya, G. (2011). A comparison of the

scapular manipulation and Kocher's technique for acute anterior dislocation of the shoulder. *Eklem Hastalıkları ve Cerrahisi*, 22(1), 28 – 32.

Salanti, G., Ades, A. E., & Ioannidis, J. P. A. (2011). Graphical methods and numerical

summaries for presenting results from multiple-treatment meta-analysis: An overview and tutorial. *Journal of Clinical Epidemiology*, 64(2), 163 – 171.

<https://doi.org/10.1016/j.jclinepi.2010.03.016>

*Sapkota, K., Shrestha, B., Onta, P. R., & Thapa, P. (2015). Comparison between external

rotation method and Milch method for reduction of acute anterior dislocation of shoulder. *Journal Of Clinical & Diagnostic Research*, 9(4), 3 – 5.

<https://doi.org/10.7860/JCDR/2015/11850.5738>

*Sayegh, F. E., Kenanidis, E. I., Papavasiliou, K. A., Potoupnis, M. E., Kirkos, J. M., &

Kapetanios, G. A. (2009). Reduction of acute anterior dislocations: A prospective

randomized study comparing a new technique with the Hippocratic and Kocher methods.

The Journal of Bone and Joint Surgery. American Volume, 91(12), 2775 – 2782.

<https://doi.org/10.2106/JBJS.H.01434>

Simonet, W. T., Melton, L. J., Cofield, R. H., & Ilstrup, D. M. (1984). Incidence of anterior shoulder dislocation in Olmsted County, Minnesota. *Clinical Orthopaedics and Related Research*, NO. 186(186), 186 – 191. <https://doi.org/10.1097/00003086-198406000-00030>

Spiegelhalter, D. J., Best, N. G., Carlin, B. P., & van der Linde, A. (2002). Bayesian measures of model complexity and fit. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)*, 64(4), 583 – 639. <https://doi.org/10.1111/1467-9868.00353>

Thakur, A. J., & Narayan, R. (1990). Painless reduction of shoulder dislocation by Kocher's method. *The Journal of Bone and Joint Surgery. British Volume*, 72(3), 524.

Valkenhoef, G. van, & Kuiper, J. (2020). Network meta-analysis using Bayesian methods. In *Research Synthesis Methods* (0.8-7). <https://github.com/gertvv/gemtc>

White, I. R. (2015). Network meta-analysis. *The Stata Journal*, 15, 951 – 985.

<https://doi.org/10.1177/1536867X1501500403>

Zacchilli, M. A., & Owens, B. D. (2010). Epidemiology of shoulder dislocations presenting to emergency departments in the United States. *Journal of Bone and Joint Surgery - Series A*, 92(3), 542 – 549. <https://doi.org/10.2106/JBJS.I.00450>