



ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8-11

Superior Capsular Reconstruction with Fascia Lata Auto graft for Irreparable Rotator Cuff tears using Mihata technique in the USA: Early MRI results

Paul B Roache MD, FAANA, FAAOS, USA



Faculty Disclosure Information

- Nothing to disclosure



ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8-11

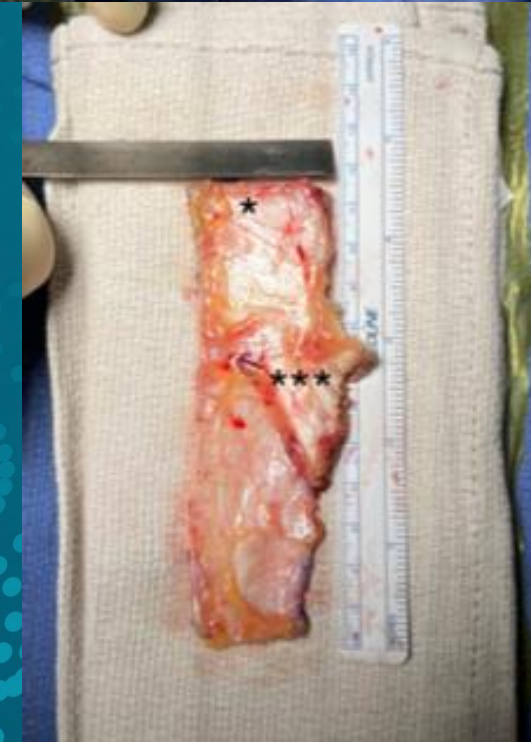
Purpose:

- Report Early MRI results for healing and graft integrity for Mihata Technique Superior Capsule Reconstruction (SCR) with Fascia Lata autograft for Irreparable Rotator Cuff Tears.



Introduction:

- Mihata pioneered SCR with Fascia Lata autograft in 2006
- Treatment for irreparable Rotator cuff tears with pseudo paralysis.
- Graft Harvest of the Fascia lata includes the intermuscular septum



*** intermuscular septum
* Greater Trochanter side



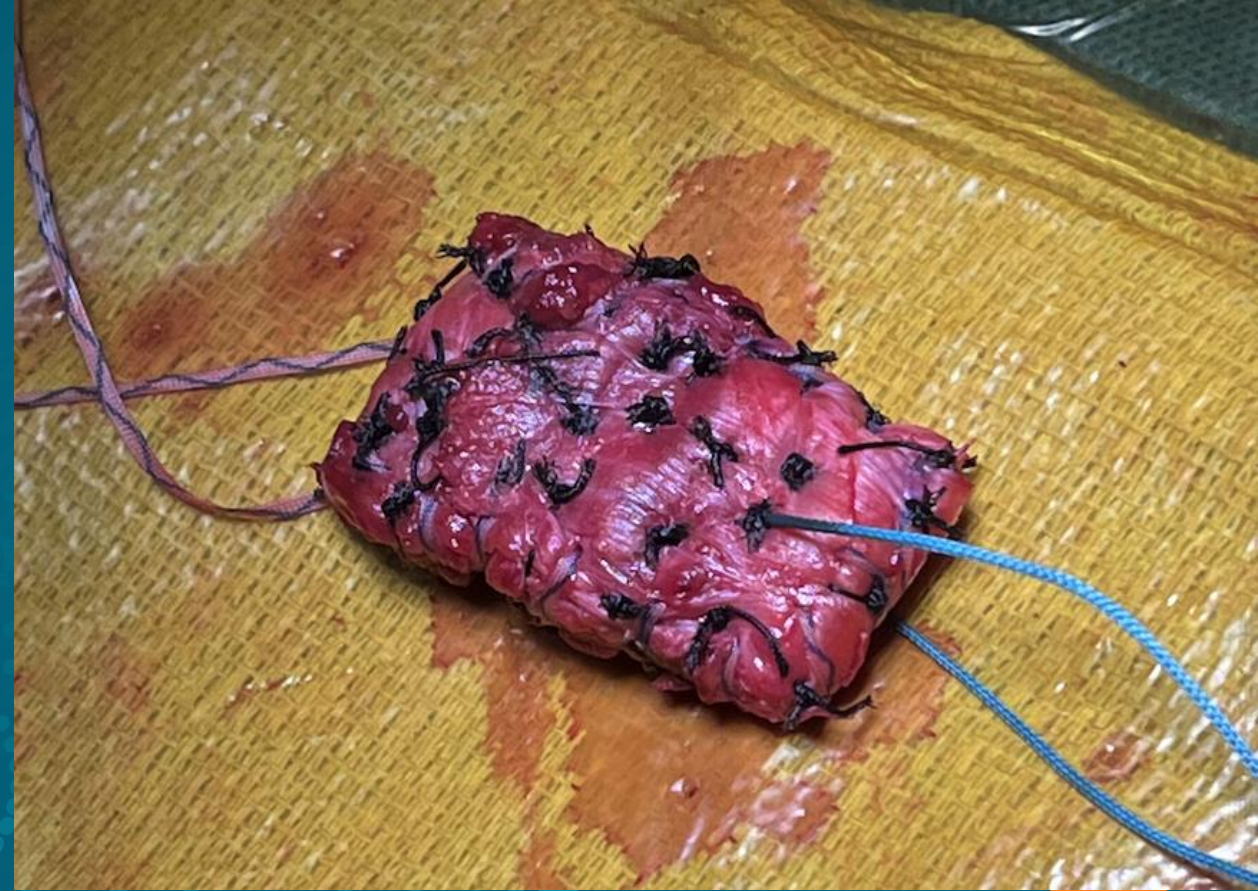
ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8-11

Introduction:

- Graft preparation requires suture compression of folded graft and included the Intermuscular septum to create a 6-8mm thick and stiff graft.
- Needed to restore superior stability. Re-establish AHD
- Biology of prepared autograft healing is excellent.



ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8-11

Methods:

- 20 consecutive SCR during 12 month period eligible for retrospective review (2023-24)
- 3 excluded because of traumatic event postop
- 17 patients with 3 and or 6 month MRI's for review.
- Surgery performed by a single senior surgeon who trained directly with Dr. Mihata
- MRI performed at a single facility on 3.0T magnetic and read by a single senior Radiologist.
- MRI read by operating surgeon independently of the radiologist.



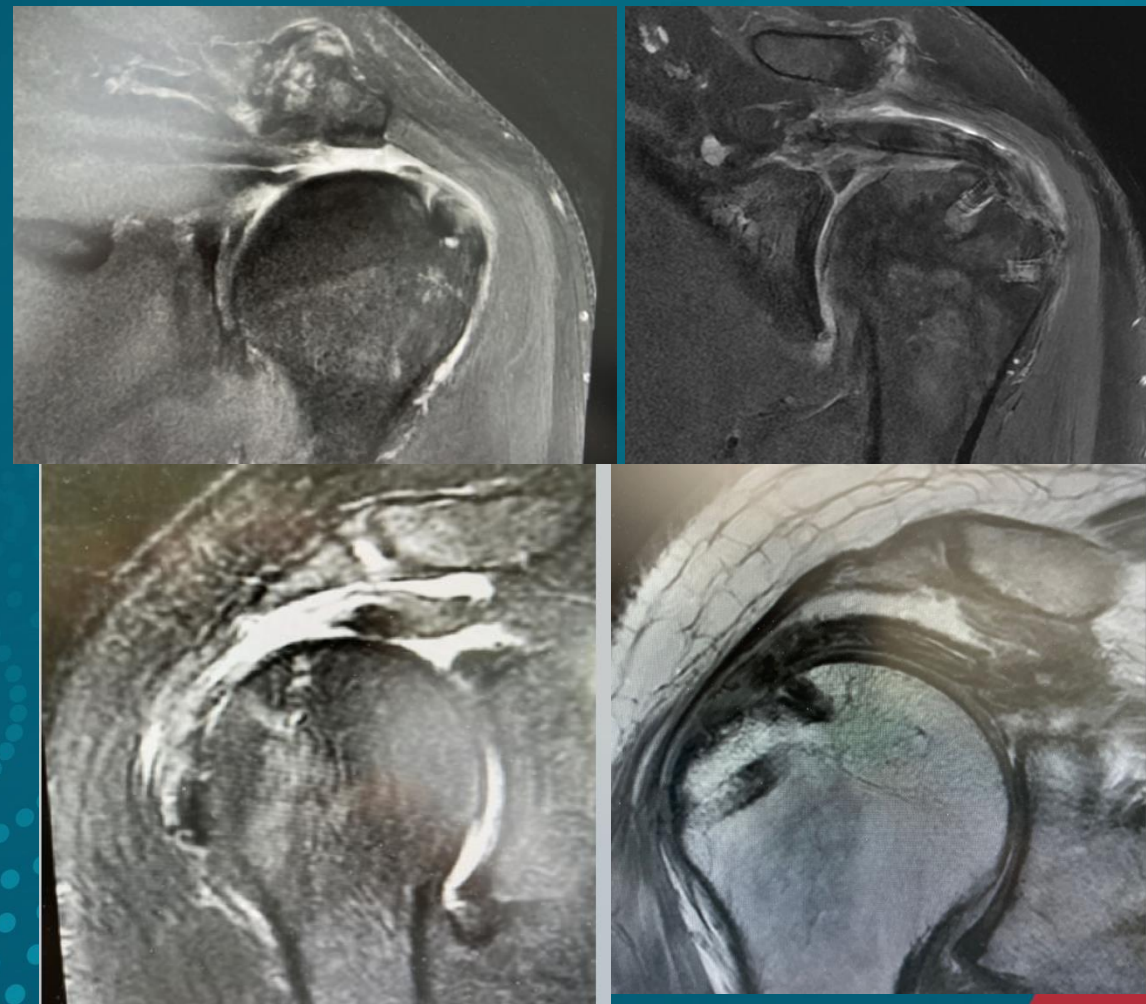
ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8-11

Results:

- 16/17 (94%) intact grafts on MRI with healing to GT and glenoid.
- 15/17 (88.2%) restored superior stability as measured by AHD.

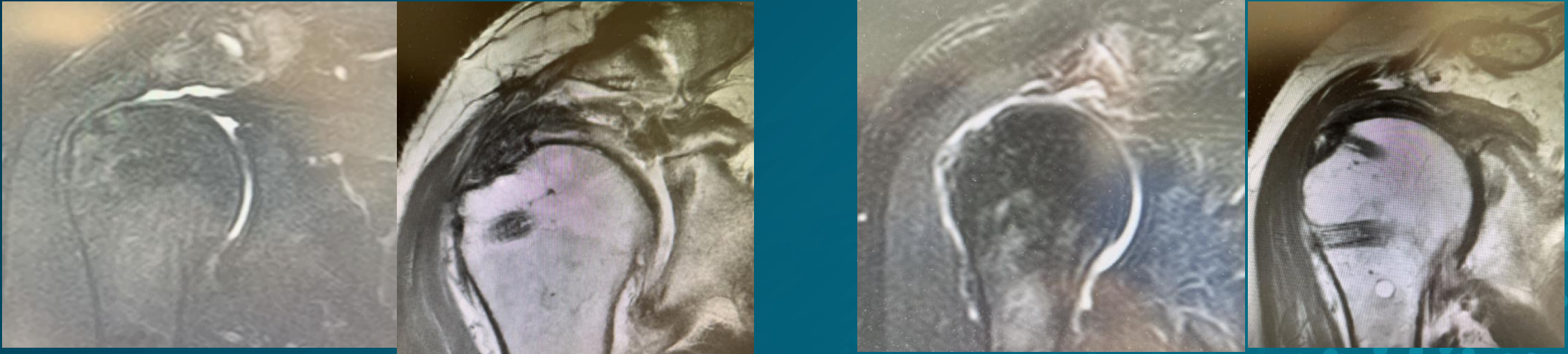


ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8-11

Results:



ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8-11

Discussion:

- Early postop healing on MRI reported to be maintained by long term published results by Dr. Mihata
- Graft healing and integrity have direct correlation with clinical success on 10 year study by Dr. Mihata
- Our documented healing and integrity of grafts on early MRI's is very high (94 %)
- Restoration AHD indicating Superior Stability is very high (88.2%)
- Early Clinical results have replicated the results reported by Dr Mihata

Conclusion:

- Early Support for efficacy of Mihata SCR with Fascia Lata autograft for irreparable rotator cuff tears in the USA.
- Patient acceptance of Harvest site confirmed
- Mid-term and Long-term results needed to confirm clinical success in USA by Mihata trained surgeon will match the success demonstrated in Japan over the last 19 years.



ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8-11

References :

1. Roache P, Dunbar A, Fascia Lata Autograft Harvest technique for SCR with Fascia Lata using Mihata Technique. Arthroscopy Techniques, Volume 0, Issue 0, 103314
doi.org/10.1016/j.eats.2024.103314
2. Roache P, Dunbar A, Preparation of Fascia Lata Autograft for Mihata Technique SCR Arthroscopy Techniques, Volume 0, Issue 0, 103289
doi.org/10.1016/j.eats.2024.103289
3. Roache P, et. al. Placement and Fixation of Fascia Lata Autograft for Mihata Superior Capsule Reconstruction Technique Arthroscopy Techniques, Volume 0, Issue 0, 103412
doi.org/10.1016/j.eats.2024.103412
4. Roache, P. and Naqvi, N. (2024) Optimizing Recovery Following Mihata Superior Capsular Reconstruction Surgery with Tensor Fascia Lata Auto Graft: A Comprehensive Rehabilitation Protocol. *Open Journal of Orthopedics*, **14**, 441-452.
[doi: 10.4236/ojo.2024.1410040.](https://doi.org/10.4236/ojo.2024.1410040)



References :

5. Mihata T, Lee T, Watanbe C, et al. .Clinical Results of Arthroscopic Superior Capsule Reconstruction for Irreparable Rotator Cuff Tears. Arthroscopy 2013; 29:459-470.
<http://dx.doi.org/10.1016/j.arthro.2012.10.022>
6. Mihata T, Lee T, Hasegawa A, et al., Five-Year Follow-up of Arthroscopic Superior Capsule Reconstruction for Irreparable Rotator Cuff Tears. J Bone Joint Surg Am. 2019;101:1921-30.
<http://dx.doi.org/10.2106/JBJS.19.00135>
7. Hasegawa A, Mihata T, Yamamoto N, et al., Postoperative graft integrity affects clinical outcomes after superior capsule reconstruction using fascia lata autograft in posterior-superior rotator cuff tears: a multicenter study. J Shoulder Elbow Surg 2023;32:1476- 1485.
<https://doi.org/10.1016/j.jse.2022.12.010>
8. Hasegawa A, Mihata T, Fukunishi K, et al. Structural and clinical outcomes after superior capsule reconstruction using an at least 6-mm-thick fascia lata autograft including the intermuscular septum. J Shoulder Elbow Surg 2023;32:48-59.
<https://doi.org/10.1016/j.jse.2022.07.010>



References :

9. Ishihara Y, Mihata T, et. al Role of the superior shoulder capsule in passive stability of the glenohumeral joint. J Shoulder Elbow Surg, 2014;23: 642-648
<http://dx.doi.org/10.1016/j.jse.2013.09.025>
10. Mihata T, McGarry M, Kahn T, et al. Biomechanical Effect of Thickness and Tension of Fascia Lata Graft on Glenohumeral Stability for Superior Capsule Reconstruction in Irreparable Supraspinatus Tears. Arthroscopy 2016;32:418-426.
[doi:10.1016/j.arthro.2015.08.024](https://doi.org/10.1016/j.arthro.2015.08.024)
11. Hasegawa A, Mihata T, Itami Y, et al. Histologic changes during healing with autologous fascia lata graft after superior capsule reconstruction in rabbit model.
J Shoulder Elbow Surg 2021; 30: 2247-2259
doi.org/10.1016/j.jse.2021.02.019
13. Liao, Yatao et al. Fascia Lata Autografts Achieve Interface Healing With the Supraspinatus Muscle Histologically and Mechanically in a Rat Supraspinatus Tendon Reconstruction Model for Massive Irreparable Rotator Cuff Tears. Arthroscopy 2024;40:11:2655 - 2666
<https://doi.org/10.1016/j.arthro.2024.02.048>

