Editorial Commentary: The Trillat Procedure May Be (Rarely) Indicated Instead of Shoulder Latarjet for Recurrent Instability, Irreparable Cuff Tear, No Pain, Preserved Active Motion, and No Critical Glenoid Bone Loss

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Abstract: The Latarjet shoulder bone block procedure for recurrent instability has largely replaced the Trillat procedure. Both procedures stabilize the shoulder by a dynamic "sling effect." Latarjet increases the anterior glenoid width or "jumping distance," whereas the Trillat prevents the humeral head anterosuperior migration. The Latarjet violates the subscapularis (albeit to a minimal degree), whereas the Trillat procedure only lowers the subscapularis. One clear indication for the Trillat procedure is recurrent shoulder dislocation associated with functioning irreparable cuff tear in patients with no pain and absence of critical glenoid bone loss. Indications matter.

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In their article titled "The Arthroscopic Trillat Procedure Is a Valuable and Durable Treatment Option for Recurrent Anterior Instability Associated With Massive Irreparable Cuff Tears," Boileau, Clowez, Bouacida, Walch, Schwartz, and Trojani reported decent outcomes in the rare cases of recurrent shoulder dislocation combined with irreparable cuff tear.[1] The Latarjet procedure has become more popular and has largely replaced the Trillat procedure, even though both procedures were introduced around the same time and provide similar mechanisms for stability.[2-4] Although the Trillat procedure is still used by some surgeons,[5,6] most probably have only heard the name of the procedure or read about it in the literature, and it is becoming forgotten. Therefore, it is unclear whether the Trillat procedure confers significant benefit compared with the common Latarjet procedure or other bone block procedures. Both Latarjet and Trillat procedures stabilize the shoulder by the dynamic "sling effect."[7,8] Latarjet increases the "jumping distance," whereas the Trillat prevents the humeral head anterosuperior migration. Also, although the Latarjet violates the subscapularis (albeit to a minimal degree), the Trillat procedure only lowers the subscapularis.

In the current study by Boileau et al., we can see one clear indication for the Trillat procedure: recurrent shoulder dislocation associated with functioning irreparable cuff tear. Although the authors acknowledged that this study included only a small number of patients without a control group, they should be commended on their efforts to prospectively collect the data on extremely rare cases for such a long time without any loss to follow-up. For rare and complicated situations such as recurrent dislocation with an irreparable cuff tear, we can place more value on case series or even case reports over numerous comparative studies.

The Trillat procedure revisited by Boileau et al. shows us a relatively easy, appealing way to resolve recurrent dislocation combined with functioning irreparable cuff tear. Only indication matters. The Trillat procedure could be an excellent option for patients with no pain and preserved active shoulder motion. If there is a critical glenoid bone loss, Latarjet or other bone block

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procedures should be considered. Another concern is the limitation of external rotation, as observed in previous studies regarding the Trillat procedure.[5,6,9] Although patients do not complain about such a small limitation, we are not sure about the long-term consequences yet. What we need next is supporting reports on the use of the Trillat procedure from other surgeons—it should be reproduced in other surgeons' hands and in my hands.

References

1. Boileau P, Clowez G, Bouacida S, Walch G, Schwartz DG, Trojani C. The arthroscopic Trillat procedure is a valuable and durable treatment option for recurrent anterior instability associated with massive irreparable cuff tears. *Arthroscopy* 2023;39:935-945.
2. Latarjet M. Treatment of recurrent dislocation of the shoulder. *Lyon Chir* 1954;49:994-997.
3. Trillat A. Treatment of recurrent dislocation of the shoulder; technical considerations. *Lyon Chir* 1954;49:986-993 [in French].
4. Bishop JY, Hidden KA, Jones GL, Hettrich CM, Wolf BR, Group MS. Factors influencing surgeon's choice of procedure for anterior shoulder instability: A multicenter prospective cohort study. *Arthroscopy* 2019;35:2014-2025.
5. Jouve F, Graveleau N, Nove-Josserand L, Walch G. Recurrent anterior instability of the shoulder associated with full thickness rotator cuff tear: Results of surgical treatment. *Rev Chir Orthop Reparatrice Appar Mot* 2008;94:659-669 [in French].
6. Walch G, Dejour H, Trillat AG. Recurrent anterior luxation of the shoulder occurring after the age of 40. *Rev Chir Orthop Reparatrice Appar Mot* 1987;73:609-616 [in French].
7. Yamamoto N, Muraki T, An KN, et al. The stabilizing mechanism of the Latarjet procedure: A cadaveric study. *J Bone Joint Surg Am* 2013;95:1390-1397.
8. Giles JW, Boons HW, Elkinson I, et al. Does the dynamic sling effect of the Latarjet procedure improve shoulder stability? A biomechanical evaluation. *J Shoulder Elbow Surg* 2013;22:821-827.
9. Gerber C, Terrier F, Ganz R. The Trillat procedure for recurrent anterior instability of the shoulder. *J Bone Joint Surg Br* 1988;70:130-134.