Remplissage reduces the risk of postoperative recurrent instability versus bankart repair alone in medium-term follow-up

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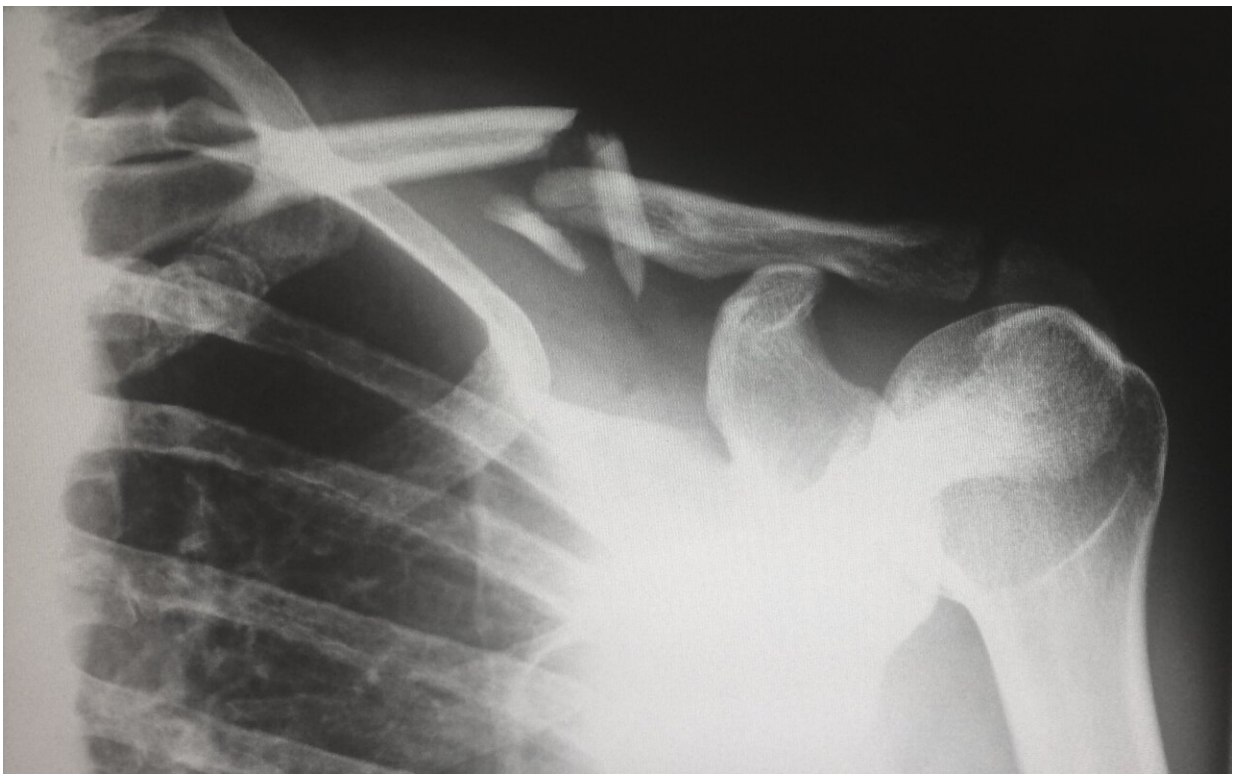

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Patients undergoing a Bankart repair with remplissage have a better rate of survival than those with an isolated Bankart repair, according to research presented today at the American Orthopaedic Society of Sports

Medicine 2022 Annual Meeting.

According to previously reported research results from a two-year follow-up comparing patients who received arthroscopic Bankart repair with/without remplissage for the treatment of traumatic recurrent shoulder instability, there is a greater risk of postoperative recurrent instability in patients without a remplissage. The researchers from that previous study, led by Peter MacDonald, M.D., from the Pan Am Clinic in Winnipeg, Manitoba sought to determine whether the earlier findings change after a longer-term follow-up.

Dr. Sheila McRae, also from the Pan Am Clinic, presented the research.

According to AOSSM, the remplissage (French, "to fill in") procedure during arthroscopic stabilization prevents recurrent dislocations in two ways: the infraspinatus tenodesis acts as a checkrein against the anterior translation of the humeral head and filling in the defect with the tendon and capsule converts the Hill-Sachs lesion to an extra-articular defect, preventing it from engaging the glenoid.

Enrolled patients were randomized intra-operatively to an arthroscopic Bankart with remplissage (52 patients in the REMP group) or isolated Bankart repair (50 patients in the NO REMP group) between 2011 and 2017. Inclusion criteria were patients 14 years or older diagnosed with traumatic anterior shoulder instability with a glenoid defect >15% and the presence of a Hill-Sachs defect (of any size).

Patients were contacted by telephone (Spring 2020) and asked standardized questions to determine whether any additional information regarding subluxations, dislocation, or additional surgery occurred since their two-year follow-up. 'Recurrent instability' was defined as patient-reported dislocation or two or more episodes of subluxation.

For the time factor in the survival analysis, the number of months from time of surgery to outcome (either failure or no failure) was based on the time of the long-term follow-up phone call, or from the time of last reported outcome based on clinical or study follow-ups, whichever was the greatest. These were conducted for: 1) recurrent instability and 2) dislocations.

Study groups were similar at baseline concerning age, gender, and BMI. Fifty-four patients were randomized to each study group at the time of the original study, with 52 patients in the REMP and 50 patients in the NO REMP group included in the analyses up to 24 months post-operative.

Of those, 36 from each group were available for mid-term follow-up. The mean months (mean) from surgery to the last follow-up was 53.8 for REMP and 49.3 for NO REMP. The odds ratio of recurrent instability in the NO REMP group relative to the REMP group was 4.029 (1.337-12.135; p=0.010) and the survival curve was significantly different favoring REMP ($\chi 2 = 6.958$, P=0.008). Concerning dislocations only, the odds ratio in the NO REMP group relative to REMP was 3.385 (0.999-11.463; p=0.041) and the survival curve was also significantly different favoring the REMP ($\chi 2 = 4.412$, p=0.036).

"We found that the rate of postoperative recurrent instability at medium-term follow-up was lower (10% (5/52) in the REMP group at an average of 24 months than the NO REMP group (30 % 15/50) at an average of 19.5 months (p=0.010)," Dr. McRae reported.

Provided by American Orthopaedic Society for Sports Medicine