

Fort taux de retour au sport et au travail chez les militaires opérés d'une capsulodèse postérieure arthroscopique de poignet

High Return-to-Sport and Return-to-Work Rates in Military Personnel After Arthroscopic Posterior Capsulodesis of the Wrist

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Résumé

Objectif : L'objectif principal de cette étude est d'évaluer le retour au travail des militaires présentant une lésion du ligament scapho-lunaire opéré par capsulodèse arthroscopique postérieure.

Matériel et Méthodes : Une étude de cohorte prospective a été menée chez tous les patients militaires opérés d'une capsulodèse postérieure arthroscopique isolée au poignet entre 2019 et 2024 selon la technique de Mathoulin.

Résultats : 19 poignets ont été opérés chez 18 patients : 7 score 3B, 6 score 3C, 5 score 4, 1 score 5 de la classification EWAS. 1 patient a été perdu de vue. L'âge moyen était de 35 ans $\pm$ 8 ans. La durée moyenne de suivi est de 24 mois $\pm$ 13. Tous les patients ont repris le travail à une charge de travail identique ou supérieure à celle précédant le traumatisme. Un seul patient n'a pas repris le sport, tous les autres l'ont repris au niveau précédant le traumatisme. Le QuickDash moyen post-opératoire est de 8,55 $\pm$ 10,78, le PRWE 14,28 $\pm$ 14.

Conclusion : La capsulodèse postérieure arthroscopique permet un fort taux de retour au travail nécessitant des ports de charges lourdes et de retour au sport y compris chez des stades avancés de lésion scapho-lunaire (score EWAS 3C ou 4).

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Mots clés

- Capsulodèse postérieure arthroscopique
- dissociation scapholunaire
- militaire.

Abstract

The management of scapholunate instability remains a controversial topic. Early-stage diagnosis is challenging, and if left untreated, the natural progression often leads to radiocarpal osteoarthritis, which can be highly disabling. Since the advent of arthroscopy, numerous new treatment options have emerged. The aim of this study is to evaluate the clinical effectiveness of a minimally invasive arthroscopic dorsal capsuloplasty technique in a young and active population from the French military.

Context: Scapholunate ligament injuries cause wrist pain, which is aggravated by hyperextension, and lead to a loss of strength. Military duties require a high level of physical fitness for sports activities and carrying heavy loads.

Objective: The primary objective of this study is to evaluate the return to work in military personnel with scapholunate ligament injuries treated by arthroscopic posterior capsulodesis. Secondary objectives include assessing return to sport, changes in wrist range of motion and pain during forced hyperextension (preoperative vs. postoperative), functional wrist scores, and radiological outcomes.

Material and methods: A prospective cohort study was conducted on all military patients who underwent isolated arthroscopic posterior capsulodesis of the wrist between 2019 and 2024, using the technique originally described by Mathoulin. Return to work was assessed using the REFA physical workload scale. Patients were evaluated clinically to assess wrist pain during hyperextension using a numeric rating scale, and to calculate the QuickDASH and PRWE scores. Radiographs were analyzed by the operating surgeon.

Level of evidence: Prospective cohort study. Level III.

Results: Nineteen wrists were operated in eighteen patients: 7 had EWAS stage 3B, 6 stage 3C, 5 stage 4, and 1 stage 5. One patient was lost to follow-up. The mean age was 34 $\pm$ 8.1 years, and the average follow-up duration was 23.9 $\pm$ 13 months. All patients returned to work at a physical workload level equal to or greater than before the injury. Only one patient did not return to sports; all others resumed sports at their pre-injury level. The mean postoperative QuickDASH score was 8.55 $\pm$

10.78, and the PRWE was 14.28 ± 14 . Pain during wrist hyperextension under load decreased from 6.6/10 preoperatively to 2.6/10 postoperatively ($p < 0.01$). Mean wrist flexion decreased from 84° to 74° ($p = 0.03$), and extension increased from 75° to 82° ($p = 0.234$). The scapholunate angle changed from 57.0° to 60.2° ($p = 0.774$), and the diastasis from 2.2 mm to 3 mm ($p = 0.077$).

Conclusion: Arthroscopic posterior capsulodesis allows for a high rate of return to work involving heavy lifting, as well as return to sports, even in advanced stages of scapholunate injury (EWAS score 3C or 4). Postoperative wrist functional scores are very satisfactory. While the technique does not eliminate hyperextension pain, it significantly reduces it.

Keywords

- Arthroscopic posterior capsulodesis
- scapholunate dissociation
- military patients
- prospective follow-up
- capsuloligamentous repair.