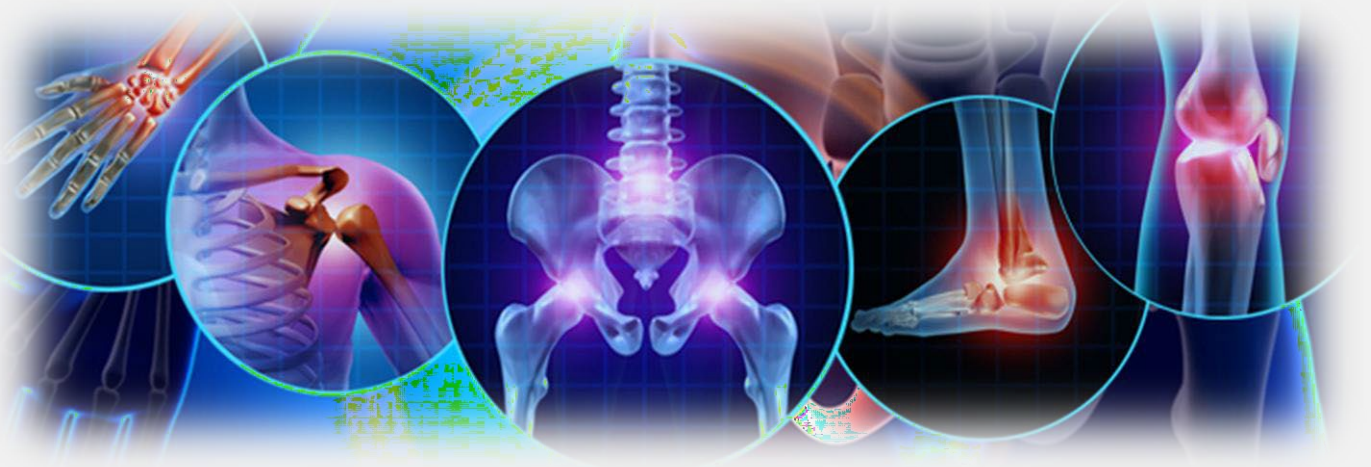


ORTHO NEWSCAST



Issue 4 | 2020

Dear Doctor,
Greetings from Micro Labs. We are happy to bring you "Ortho Newscast" which contains latest and interesting news in the field of Orthopaedics.

This issue contains

- Functional Outcomes Are Similar after Early and Late Arthroscopic One-tunnel Transosseous Repair
- Tendon stem cells could revolutionise injury recovery

Should you require any specific article or medical information, please feel free to contact us at medicalservices@microlabs.in

Looking forward to your valuable feedback

Best Regards,
Medical Team,
Micro Labs Limited



1. Functional Outcomes Are Similar after Early and Late Arthroscopic One-tunnel Transosseous Repair

Background

To compare outcomes at different time periods following arthroscopic triangular fibrocartilage complex (TFCC) transosseous foveal repair within 6 months, between 6 and 12 months, and more than 12 months from injury.



Methods

The patients were assigned to one of three groups according to time between injury and surgery. Pain visual analog scale (VAS); grip strength; modified Mayo wrist score (MMWS); Quick disabilities of the arm, shoulder, and hand (QuickDASH) score; and distal radioulnar joint (DRUJ) stability were assessed at minimum two years postoperatively, along with minimal clinically important difference (MCID), and overall patient satisfaction. Consecutive patients were treated with arthroscopic TFCC foveal repair using the uniform one-tunnel transosseous suture technique.

Results

This study cohort consisted of 80 patients: Group A (< 6 months, n = 38), Group B (6–12 months, n = 20), and Group C (> 12 months, n = 22). No differences were found among groups in VAS, grip strength, and MMWS and QuickDASH. Overall, patients exhibited significant functional improvement at two years.

Conclusion: Patients with a TFCC foveal tear who underwent arthroscopic transosseous repair surgery more than 12 months after injury could expect to experience similar functional improvement compared with patients who underwent surgery within 6 months or between 6 and 12 months following injury.

References

Park JH, Lim JW, Kwon YW, et al. Functional Outcomes Are Similar After Early and Late Arthroscopic One-tunnel Transosseous Repair of Triangular Fibrocartilage Complex (TFCC) Foveal Tears. *Arthroscopy*. 2020;S0749-8063(20)30271-1.

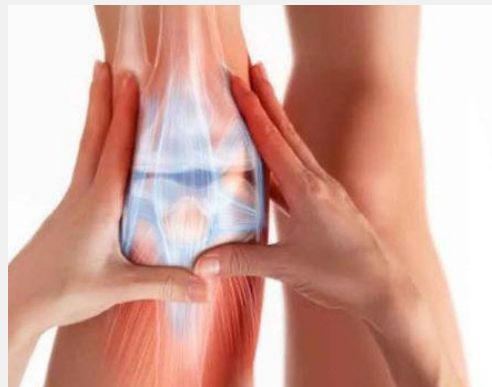


IN THE NEWS

Tendon stem cells could revolutionise injury recovery

The build-up of scar tissue makes recovery from torn rotator cuffs, jumper's knee, and other tendon injuries a painful and challenging process, often leading to secondary tendon ruptures.

Researchers have found that tendon stem cells that could potentially be harnessed to improve tendon healing and even to avoid surgery. All the cell types present in the Patellar tendon are found below the kneecap, including previously undefined tendon stem cells.



Both fibrous scar tissue cells and tendon stem cells originate in the same space – the protective cells that surround a tendon. These tendon stem cells are part of a competitive system with precursors of fibrous scars, which explains why tendon healing is such a challenge.

Tendon stem cells exist, but they must outcompete the scar tissue precursors in order to prevent the formation of difficult, fibrous scars.

References

Harvey T, Flamenco S, Chen-Ming Fan. A Tppp3 Pdgfra tendon stem cell population contributes to regeneration and reveals a shared role for PDGF signalling in regeneration and fibrosis. Nature Cell Biology, 2020



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