

ORTHO NEWSCAST



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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

1. Comparison of Acute Repair v/s Delayed Percutaneous Repair of Achilles tendon Ruptures
2. OSSIOfiber: Intelligent Bone Regeneration Technology

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. Comparison of Acute Repair v/s Delayed Percutaneous Repair of Achilles tendon Ruptures

Background

Delay in diagnosing acute Achilles tendon (AT) ruptures is relatively frequent. 20% of such acute injuries are missed at presentation either because of failure to diagnose the injury or because patients do not seek medical attention, underestimating the injury. There is controversy regarding if apposition of the ruptured tendon ends has not been achieved within 2 weeks of injury, long-term prognosis may be poor. Patients with AT ruptures who present late have been considered as necessitating an open repair. A minimally invasive technique can be used to manage Achilles tendon ruptures in patients presenting between 14 and 30 days from injury.



Methodology

21 patients were prospectively recruited who presented between 14 and 30 days after the index injury, and were compared with 21 patients who were matched according to sex, age, and level of activity, who presented within 14 days of the index injury. All patients underwent the same minimally invasive procedure under local anesthesia: a core suture repair consisting of a modified Bunnell suture in the proximal stump and a modified Kessler suture in the distal stump.

Results

At 12 months after minimally invasive repair, patients with delayed treatment had a median Achilles tendon rupture score of 91 (SD, 2.4; range, 87-96) as compared with 91 (SD, 2.2; range, 86-96) in patients treated acutely, who presented at a median 2.4 days (range 1-6 days) from the injury.

Outcome Measure	Delayed Repair	Acute Repair	P Value
ATRA	-3.9 (2.0)	-3.7 (1.9)	.69
ATRS	91.1 (2.4)	91.2 (2.2)	.84

Results at 12 Months After Surgery: Delayed vs Acute Repair of Achilles Tendon Ruptures



There were no significant differences between groups in terms of mean (SD) Achilles tendon resting angle(ATRA): delayed repair group, 23.9 (2.0); acute repair group, 23.7 (1.9) ($P = .69$). No patient in either group developed a wound infection.

Conclusion

Patients with Achilles tendon rupture treated by percutaneous repair 14 to 30 days after injury achieved similar results at 1 year as patient treated within 14 days of injury.

References

Maffulli N, D'Addona A, Maffulli GD, Gougoulis N, Oliva F. Delayed (14-30 Days) Percutaneous Repair of Achilles Tendon Ruptures Offers Equally Good Results As Compared With Acute Repair . Am J Sports Med. 2020;363546520908592.

IN THE NEWS

2. OSSIOfiber: Intelligent Bone Regeneration Technology

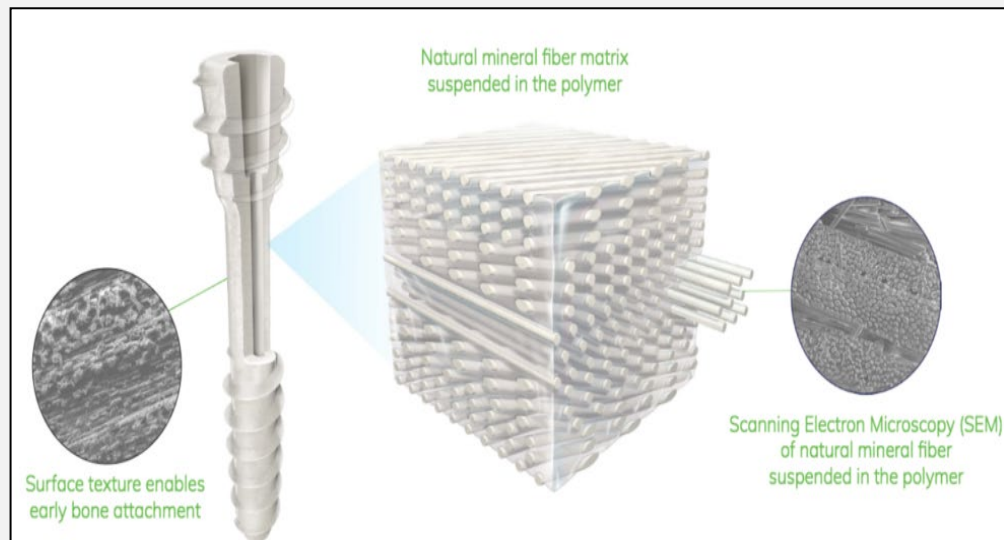
OSSIO Inc.'s OSSIOfiber Hammertoe Fixation System has received 510(k) market clearance from the U.S. Food and Drug Administration (FDA) on March 17, 2020 for maintenance of alignment and fixation of bone fractures, osteotomies, arthrodesis and bone grafts. These novel bio-integrative implants with disposable, sterile instrumentation now come in three sizes, with both straight and angled configurations for better customization among various patient anatomies.

This first-of-its-kind technology features a proprietary bio-integrative material to provide stability and secure bone fixation during the healing process, leaving no permanent hardware behind.



A new category of nonpermanent fixation material that aims to be the first credible replacement to permanent fixation implants. Made from a proprietary natural mineral fiber matrix, its bio-integrative material properties provide surgeons with a more biologically friendly way to restore patient stability and mobility while leaving nothing permanent behind.

Metal implants represent the current standard of care in orthopedic fixation; however, permanent hardware creates a suboptimal healing environment, which can lead to patient dissatisfaction and increasing healthcare costs due to postoperative complications and secondary removal surgeries.



This technology provides better mechanical match to bone and this improved bone compliance can prevent stress risers and weakening of the bone around the implant.

References:

1. Boes K OSSIO Secures Food and Drug Administration Approval on OSSIOfiber Bone Pin Family. Orthospine news March 17, 2020



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