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Percutaneous Repair Of Achilles Tendon Rupture Under Local Anesthesia: A Safe And Effective Treatment Option In Recent Years.

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Introduction

- Open surgical repair of Achilles tendon ruptures is traditionally associated with risks such as skin necrosis and infection.
- Recent advances have led to the adoption of percutaneous repair techniques, which minimize these risks by preserving the critical hematoma phase of tendon healing.
- This approach allows sutures and knots to remain beneath the skin, thereby reducing healing time and the risk of infection.



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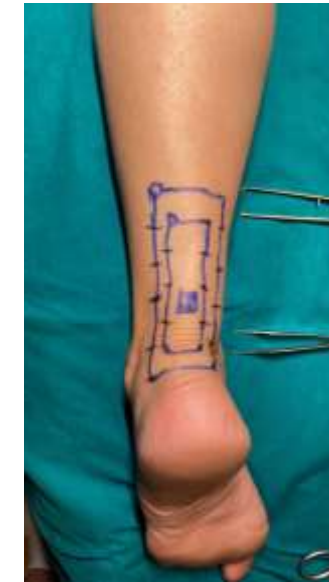


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Materials and Methods

- From January 2017 to May 2024, we used this percutaneous treatment for 42 acute ruptures.
- Mean age was 42,4 all patients were males.
- Repair was performed under local anesthesia,
- Utilized a single or double absorbable suture in a "double square" configuration



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Materials and Methods

- Postoperative care was 3 weeks in cast fixed in equinus position followed by functional orthosis with three heel.
- Patients were assessed using Visual analogue scale (VAS) at the time of surgery and 3 months follow up.
- The Achilles Tendon Rupture Score (ATRS) and AOFAS ankle-hindfoot score were assessed at the 3- and 6-month follow-up.



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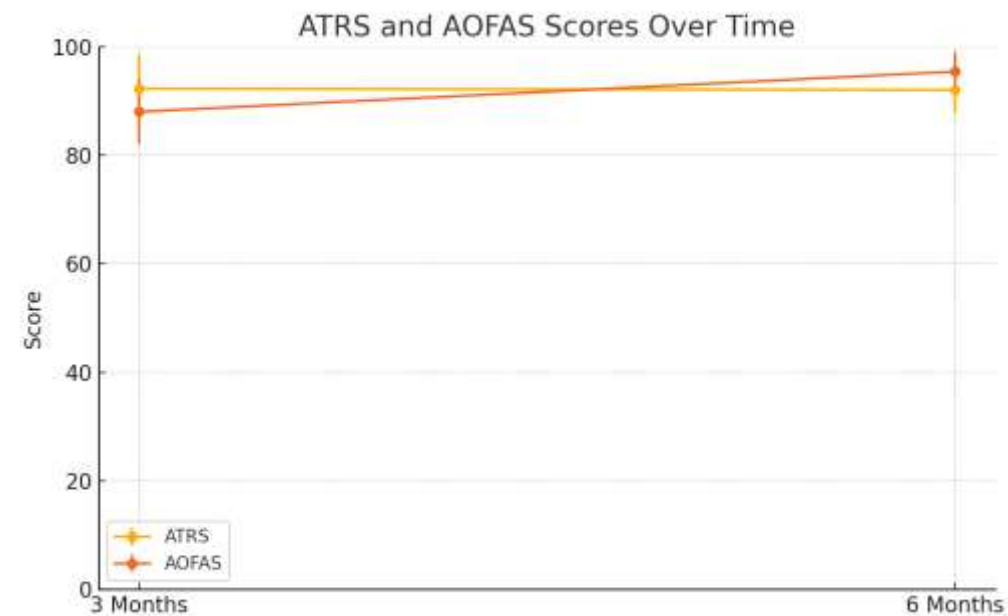
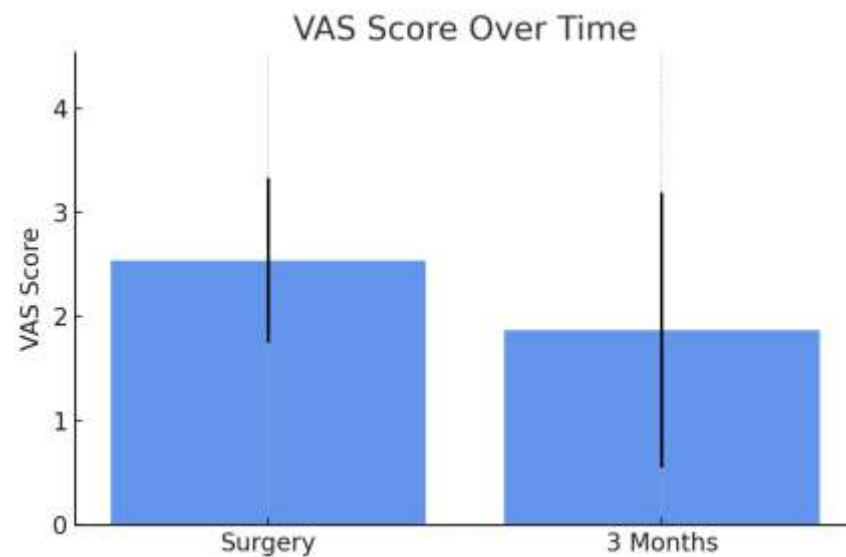
Results

- Mean follow-up was 34 months.
- Complications were 1 re-rupture at 3 months postoperatively, 2 superficial wound infection.
- Notably, no sural nerve lesions were reported.
- Mean time return to working activities was 78 days.
- Clinical results were good with no loss in ROM



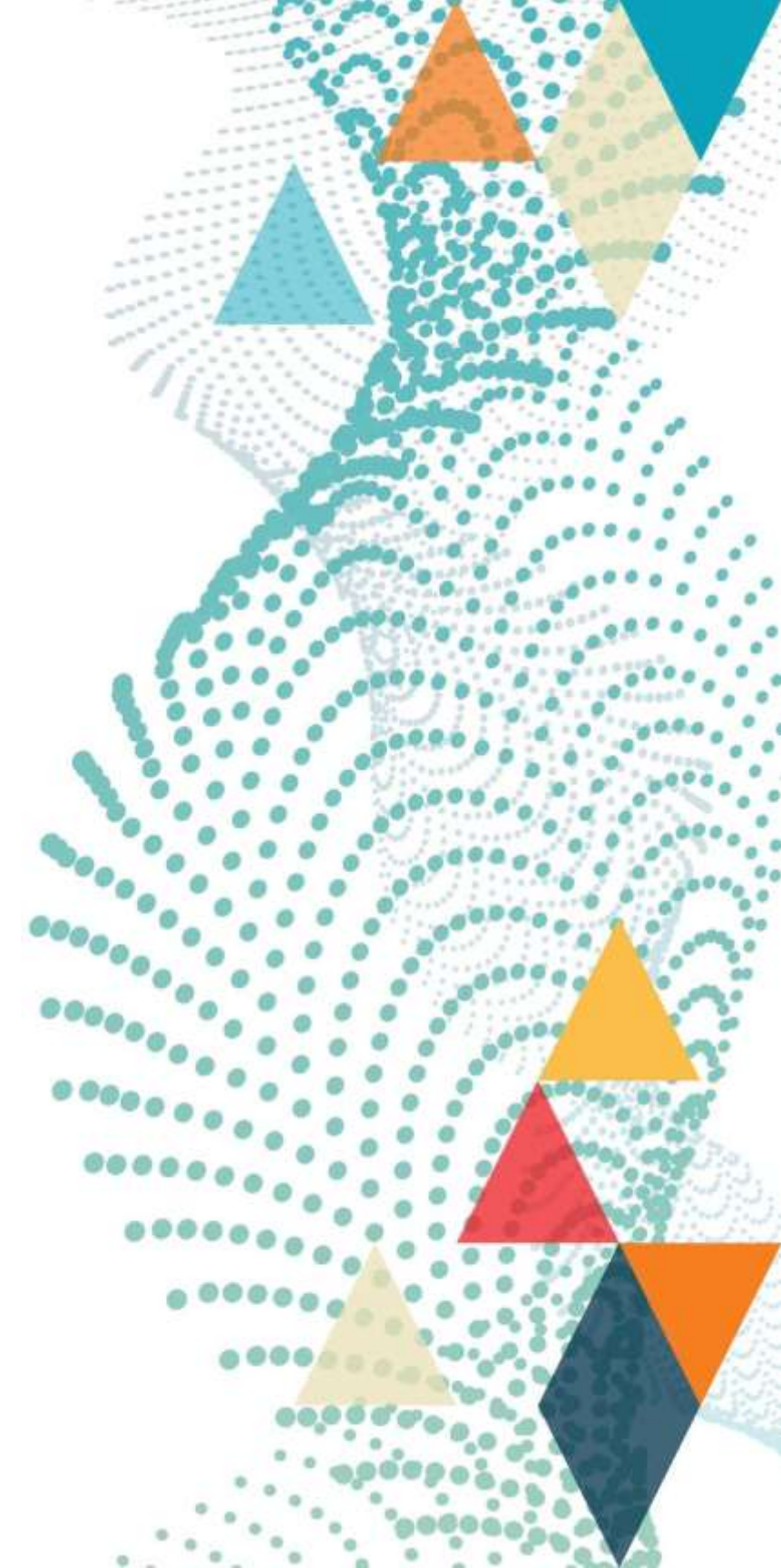
Results

- The results of VAS scoring (SD) at the time of surgery and 3 months follow-up were 2.54 (SD: 0.79), 1.87 (SD: 1.32) respectively.
- Mean (SD) ATRS score was 92.25 (SD: 6.34) points at 3 months (6.34) and 92.04 (SD: 4.37) points at 6 months follow up (4.37).
- Mean (SD) AOFAS score was 88 (SD: 5.93) points at 3 months and 95.42 (SD: 3.62) points at 6 months follow up .



Conclusion

- Percutaneous Achilles tendon repair under local anesthesia is a low-cost, effective technique
- Promotes optimal healing by preserving the natural phases of tendon repair.
- It is associated with fewer wound complications, shorter hospital stays, and quicker return to work, making it a leading treatment option for acute Achilles tendon ruptures.



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