



ISAKOS
14th Biennial Congress 2023



**A PROSPECTIVE STUDY TO EVALUATE THE RESULTS OF
ENDOSCOPIC MANAGEMENT OF HAGLUND'S SYNDROME
USING 3 PORTAL TECHNIQUE
(ABSTRACT # 22056)**

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ISAKOS 14th Biennial Congress 2023

Presenters Financial Disclosure

- I (or a member of my immediate family) **do not** have a financial interest or other relationship with a commercial company related directly or indirectly with the *ISAKOS 14th Biennial Congress 2023*.

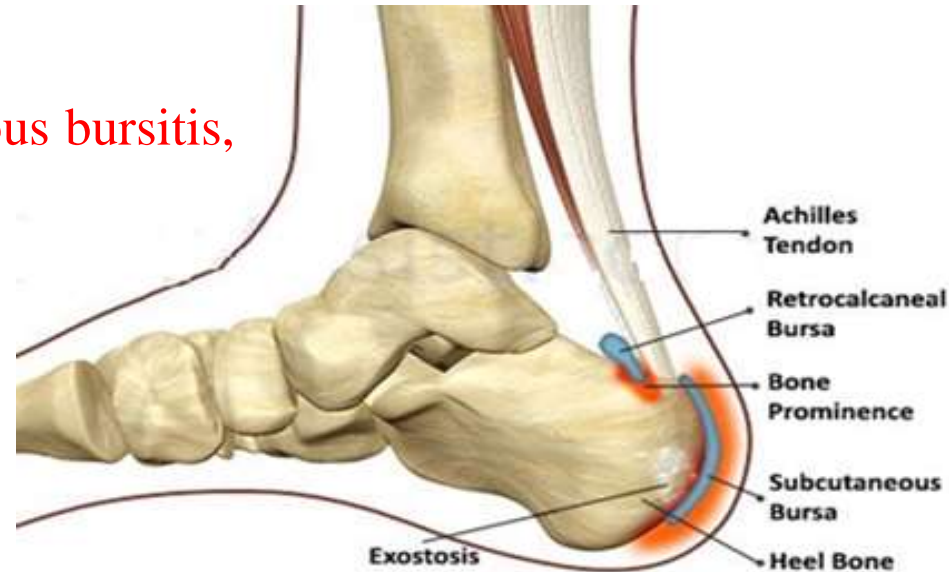
Introduction

Haglund's syndrome is one of the cause of retrocalcaneal pain.

(Haglund P. Beitrag zur Ulliwik der Achillessehne. Z OrthopChir 1928)

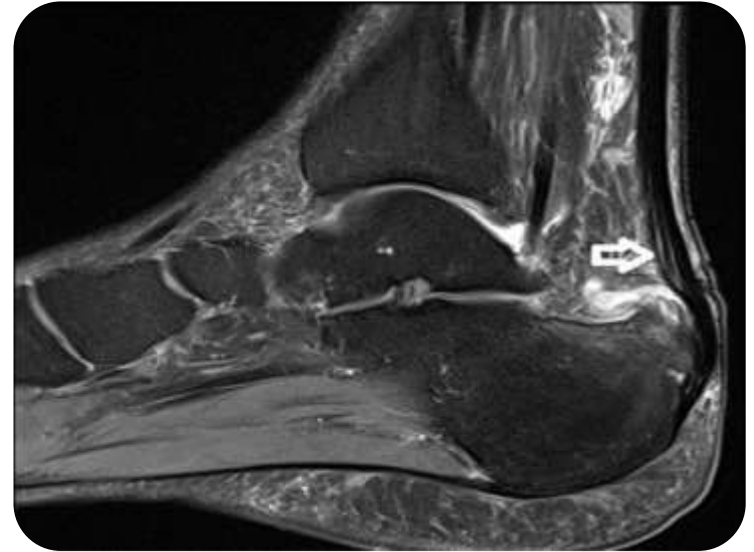
It consists of the following:

1. Retrocalcaneal and subcutaneous bursitis,
 2. Achilles tendonosis,
 3. Haglund's deformity.
- This is called Haglund's triad.



Aim of the Study

- To evaluate the results of endoscopic management of haglund's syndrome using 3 portal technique.



Methodology

- **STUDY DESIGN:** A prospective observational study.
 - Total 130 patients of HS were registered in our OPD.
 - 37 (28.4%) patients did not responded to conservative treatment.
 - 18 patients (23 heels) underwent 3-portal endoscopic calcaneoplasty.

- **Inclusion Criteria:**
 - ✓ Persistent pain after Six month of Conservative Trial

- **Exclusion criteria:**
 - Poor skin condition and local site infection.
 - Major calcific insertional tendinopathy.
 - Congenital or acquired foot deformity.
 - Posterior heel pain resulting from associated co-morbidities like rheumatoid arthritis/seronegative arthropathies/ osteoarthritis/ Gout.

Endoscopic Calcaneoplasty

Two portal Technique

- **Difficulty** in acquiring convenient manipulation along with **proper view of the Haglund's deformity.**
- The small distance between two portals causes inconvenience of endoscopic manipulation and **increase risk of injuring the instruments and structures.**

Three portal Technique

- ❖ The proximally placed portal provides **excellent visualization** of deformity and retrocalcaneal space.
- ❖ Distal working portals are adequately spaced and thus the pathology is dealt more conveniently with **less risk injury to either instruments or neurovascular structures.**

SURGICAL TECHNIQUE

Steps of ECP

- Patient positioning
- Portal placement
- Shaving of Retroachllieal bursa
- Burring of Haglund's deformity
- Wash and portal Closure
- Below knee Cast.



Proximal Posterolateral
Portal/ Viewing Portal



Distal Portals/
Working Portals

Post-operative Rehabilitation

➤ Day 0 to 2 weeks :

- B/k slab in plantiflexion and
- Non-weight bearing ambulation with walker.

➤ 2 weeks to 4 weeks:

- Crepe bandage
- Ankle ROM & partial weight bearing ambulation.

➤ 4 weeks to 6 weeks:

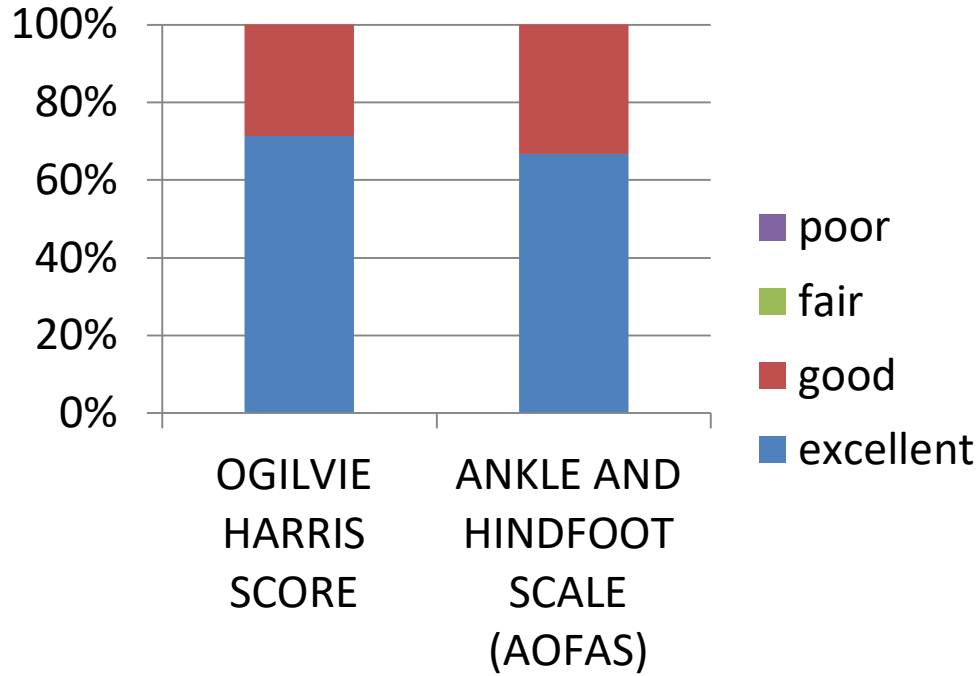
- Modified shoes with soft sole and heel raise of minimum 4 cms
- Gaurded in-house activities

➤ After 6 wks:

- Normal footwear
- Routine work

➤ Strenuous activities are avoided till 12 weeks

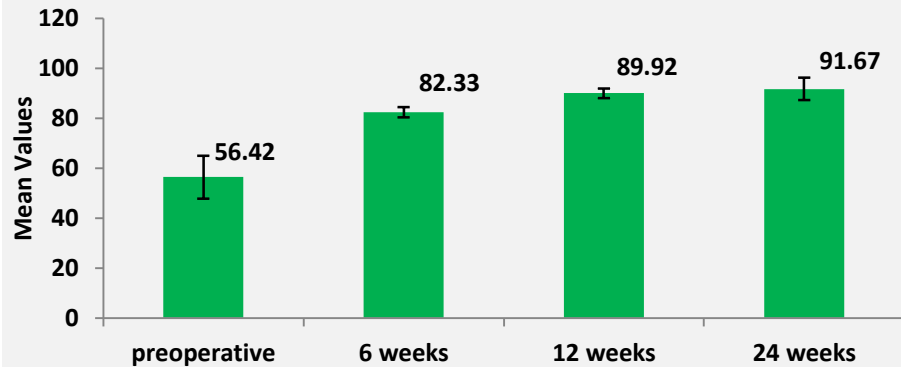
Results



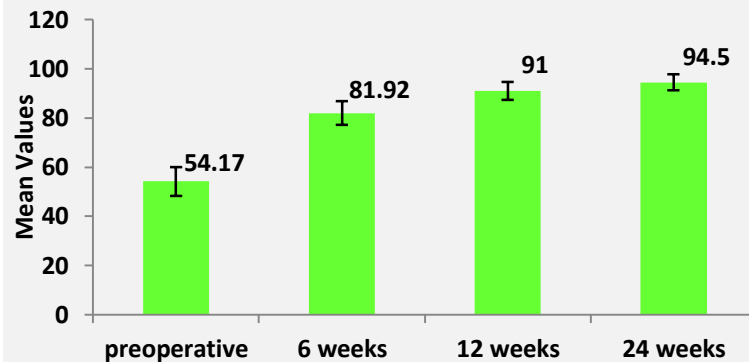
	Excellent	Good
OGILVIE HARRIS SCORE	15	8
ANKLE AND HINDFOOT SCALE (AOFAS)	14	9

NO FAIR OR POOR RESULTS WERE SEEN

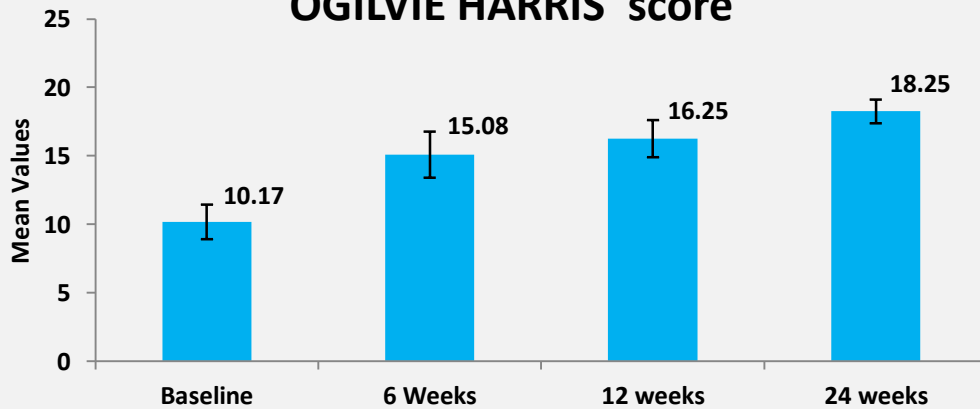
AOFAS-AH score



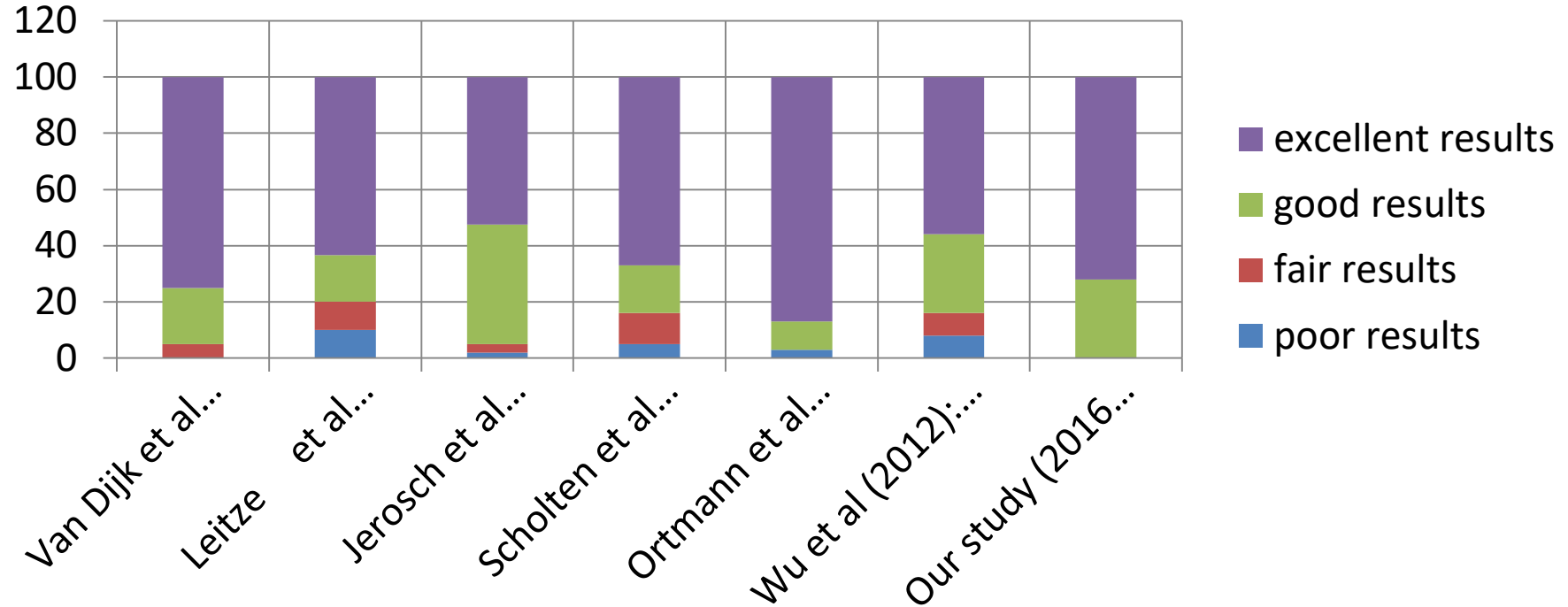
Maryland Foot Score



OGILVIE HARRIS score



Discussion



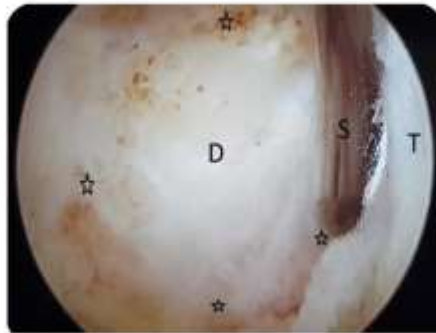
Conclusion

- Haglund's Syndrome is a common cause of heel pain.
- Surgery is required in non-responding patients.
- Endoscopic calcaneoplasty offers excellent functional outcomes and technical ease in management of patients of Haglund's syndrome.

Pre-operative X-ray



Intra-operative picture



Post operative X-ray



References

1. Haglund P. Beitrag zur klinik der Achillessehne. Zeitschr Orthop Chir. 1928;49(1): 49-58.
2. Jerosch J, Schunck J, Sokkar SH. Endoscopic calcaneoplasty (ECP) as a surgical treatment of Haglund's syndrome. Knee Surg Sports Traumatol Arthrosc. 2007;15(7):927-934.
3. Ortmann FW, McBryde AM. Endoscopic bony and soft-tissue decompression of the retrocalcaneal space for the treatment of Haglund deformity and retrocalcaneal bursitis. Foot Ankle Int. 2007; 28(2):149-153.
4. Wu Z, Hua Y, Li Y, Chen S. Endoscopic treatment of Haglund's syndrome with a three portal technique. Int Orthop. 2012;36(8):1623-1627.
5. Jerosch J, Sokkar S, Dücker M, Donner A. Endoscopic calcaneoplasty (ECP) in Haglund's syndrome. Indication, surgical technique, surgical findings and results. Z Orthop Unfall. 2012;150(3):250-256.
6. Jerosch, J. Endoscopic calcaneoplasty. Foot Ankle Clin 2015;20(1): 149-165.
7. Opdam KT, Zwiers R, Vroemen J, Sierevelt IN, Wiegerinck JI, van Dijk CN. High patient satisfaction and good long-term functional outcome after endoscopic calcaneoplasty in patients with retrocalcaneal bursitis. Knee Surg Sports Traumatol Arthrosc. 2021;29(5):1494-1501.

