

Focused and planar focused ESWT

A comparison of the Results in the
Treatment of Heel spurs

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Introduction

- **Introduction**
 - Methods
 - Indication
 - Materials:
 - Devices
 - Groups
 - Scores
 - Results
 - Group I
 - Group II
 - Compared
 - Discussion
 - Conclusion
- **ESWT in the treatment of plantar heelspurs is an approved method**
 - FDA-Approval:
 - HMT (2002)
 - Dornier (2004)
 - Studies:
 - Rompe (1996, 2004)
 - Abt (2002)
 - Wang (2000)

Plantar Fasciitis and Heelspur

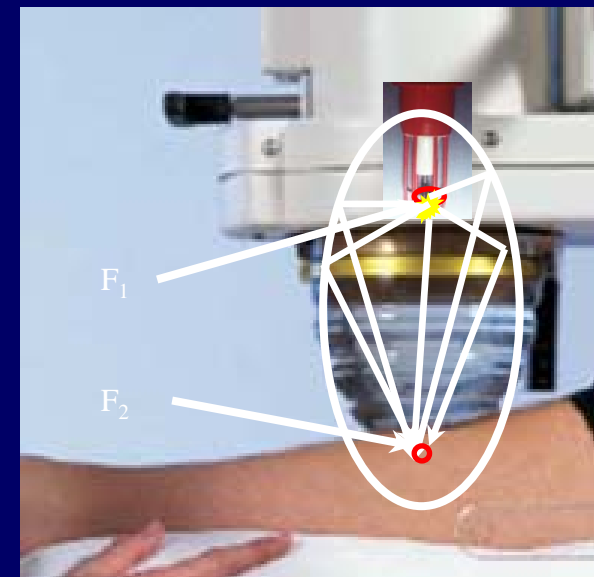
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- Pain during weight-bearing
- Typical pain in the morning and after resting-period
- Pain: intense, pungent
- Patient in the middle-ages
- Increased in athletes
- Procedure: heel-cushion, stretching, (injections)
- **ESWT**



Shockwave-Devices

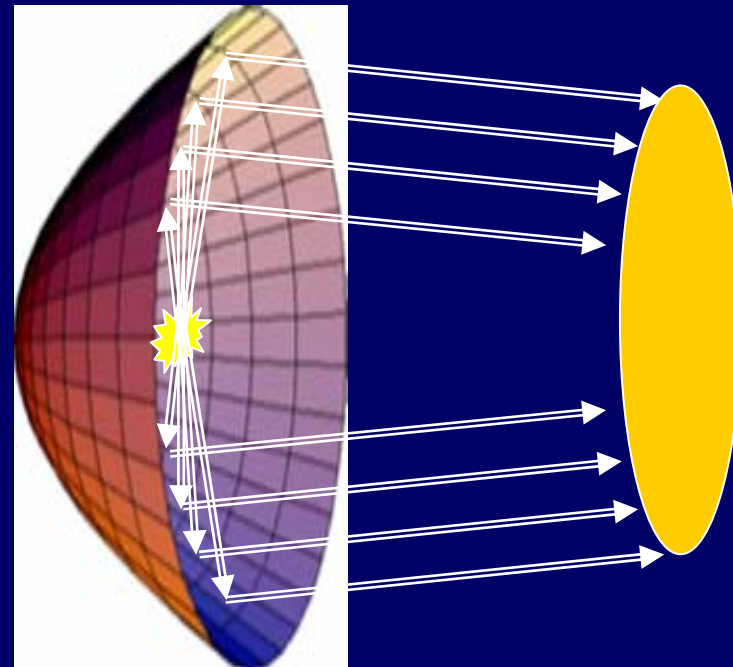
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- So far only shockwave devices with a focused or radial therapy head are in use of the orthopedic field



Shockwave-Devices

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- Since 2 years a defocused shockwave therapy head is in use for wound and skin treatment
 - This device is now introduced in the treatment of heelspurs



Aim of the Study

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- The presented work will show a comparison between two treated groups with pain by plantar fasciitis
 - Inclusion Criteria: ESWT as a treatment is indicated

Group I

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- **Group I:**
 - N= 179
 - Period: 01/2002 to 10/2005
 - Follow up: 6, 12, 18 and 24 weeks after ESWT
 - Devices:
 - Evotron by HMT
 - MTS Orthowave 180 focused
 - Parameters:
 - 1200 Impulses
 - 0.12 – 0.14 mJ/mm²
 - 5 Hz
 - Anaesthesia: local anaesthesia

Group II

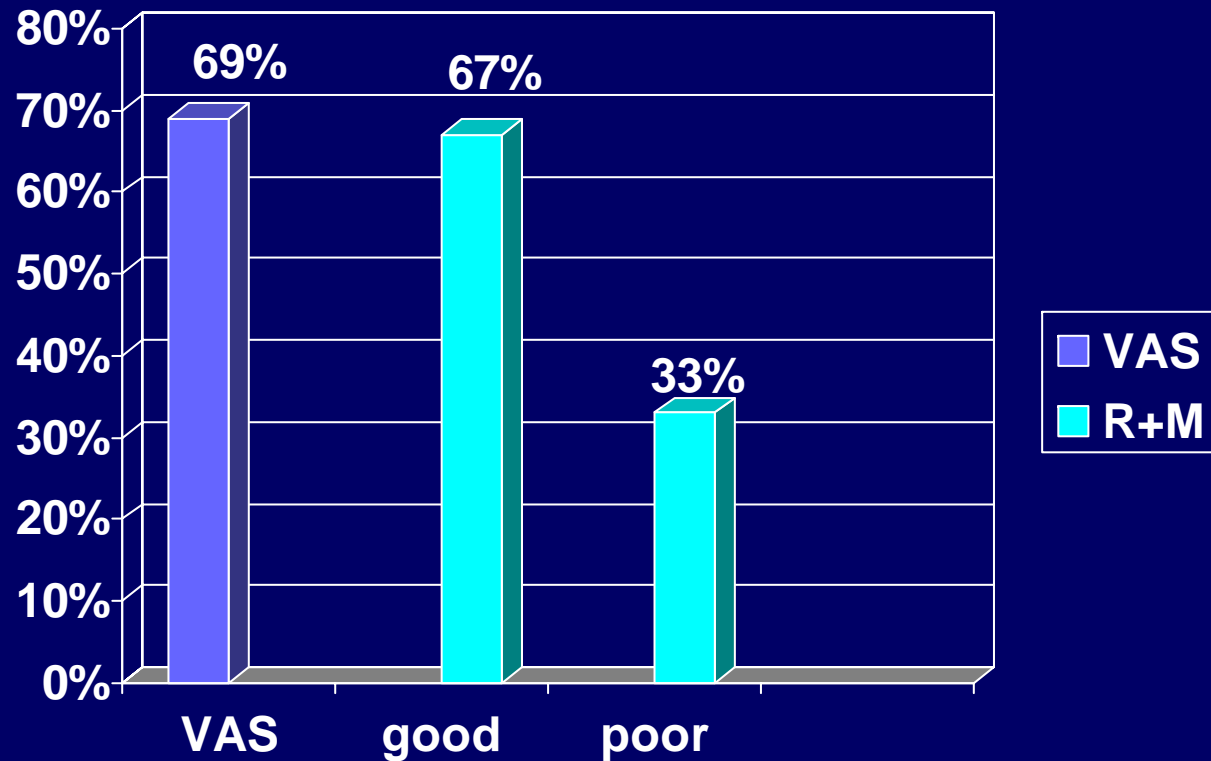
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- **Group II:**
 - N= 95
 - Period: 11/2005 to 12/2006
 - Follow up: 6, 12, 18 and 24 weeks after ESWT
 - Device:
 - MTS Orthowave 180 defocused
 - Parameters:
 - 1200 Impulses
 - 0.14 mJ/mm²
 - 5 Hz
 - Anaesthesia: no anaesthesia

Follow up Scores

- Introduction
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- Scores in use are:
 - VAS
 - Roles and Maudsley

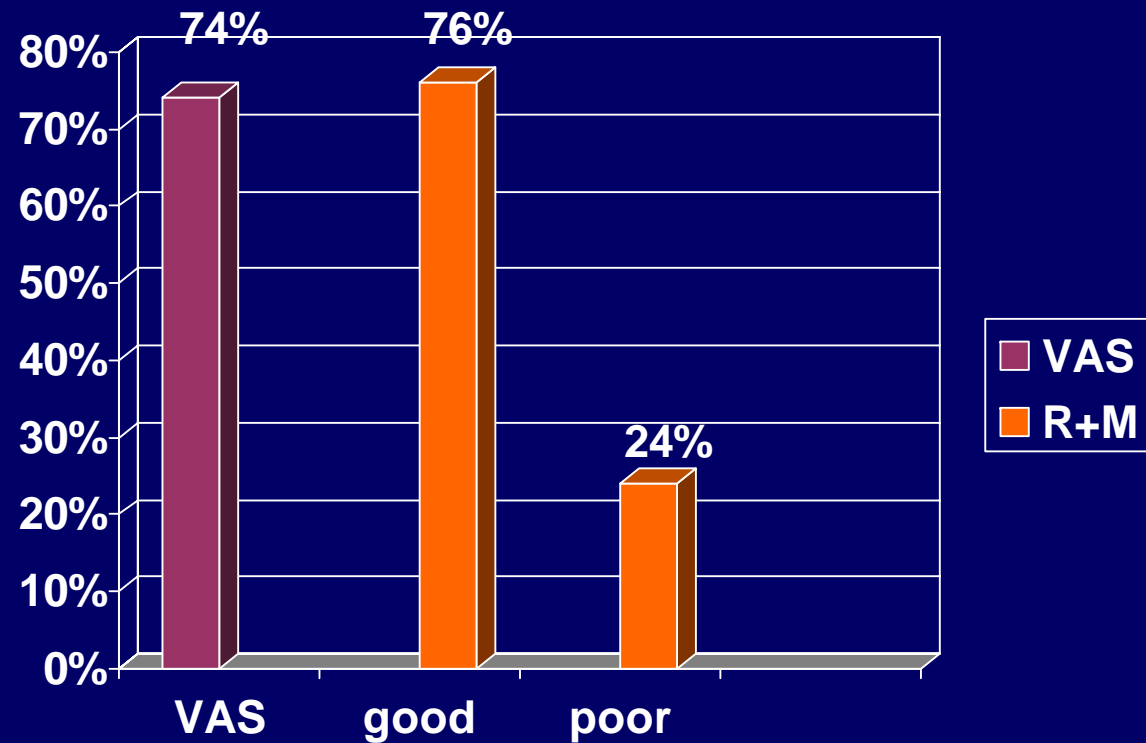
Results Group I (focused)

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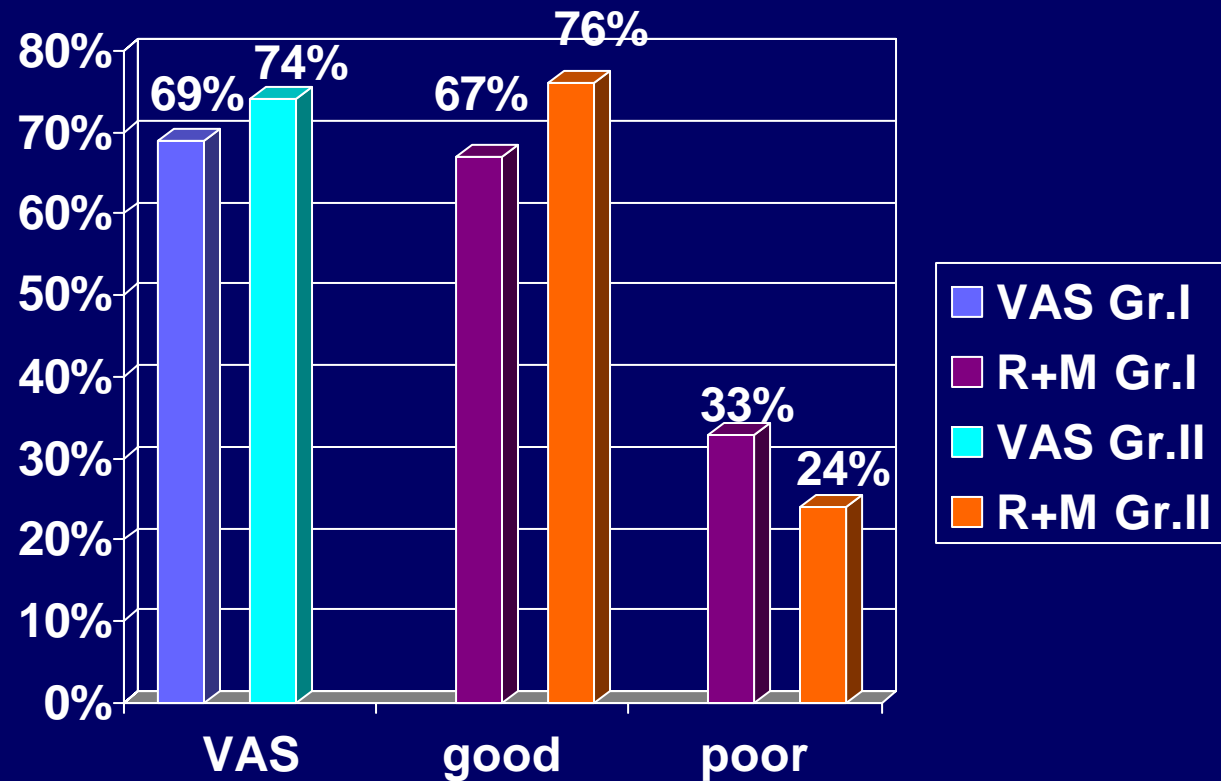
Results Group II (defocused)

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Comparison

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Discussion

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- Subjectively better results in Group II
 - Reasons might be the defocused therapy-head
 - As well could be the lack of local anaesthesia the reason for the better results

Conclusion

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 - **Conclusion**
- Using the defocused therapy-head shows comparable results
 - To us it showed even better results
 - This device still has to show it's proof of effectiveness in valid studies
 - An FDA-approval-Study is in progress

Conclusion

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The FDA-approval-Study
has started as a result of
this feasibility study

**Thank you
for your attention**