

The time has come ...



Here is the answer to Taping

MalleoTrain

MalleoTrain S

MalleoTrain Plus

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How does it work?

Stability?

*Tape loses its stabilizing effect with performance of certain time and intensity **

* Malina et al., Rarick, Alves et al., Fumich et al., Frankeny et al., Stuessi et al., Hamill, Martin et al., Bartoid, Hughes, Gross et al., Greene et al.,

Performance?

*Due to restricting qualities, performance may be deminished with tape. **

* Coffman & Nitze, Greene et al., Burks et al., Paris, Beriau, MacKean et al., Hochman, Nowalkowski, Metcalfe et al., etc.

Prevention?

*The proprioceptive Gain is known to be the main reason for injury preventive qualities of Tape. **

* Garrick JD, Robbins, Gharavi H, Burks et al., Broglio SP et al., Williams S et al., Greene TA et al., McKeon PO et al.

Methods

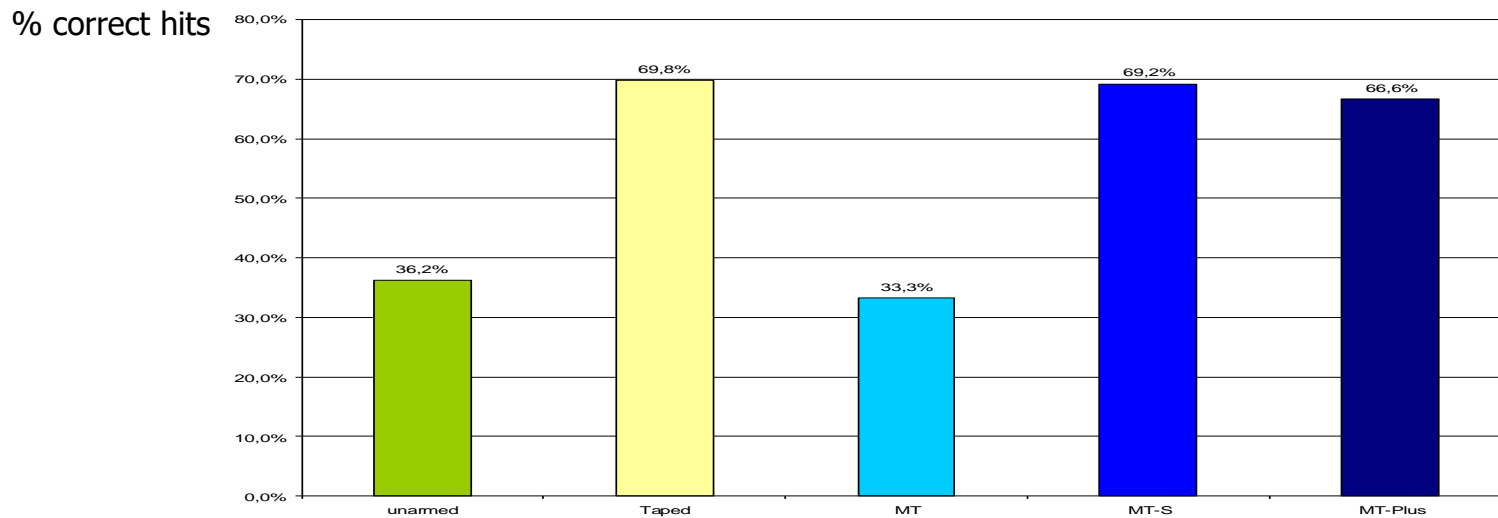
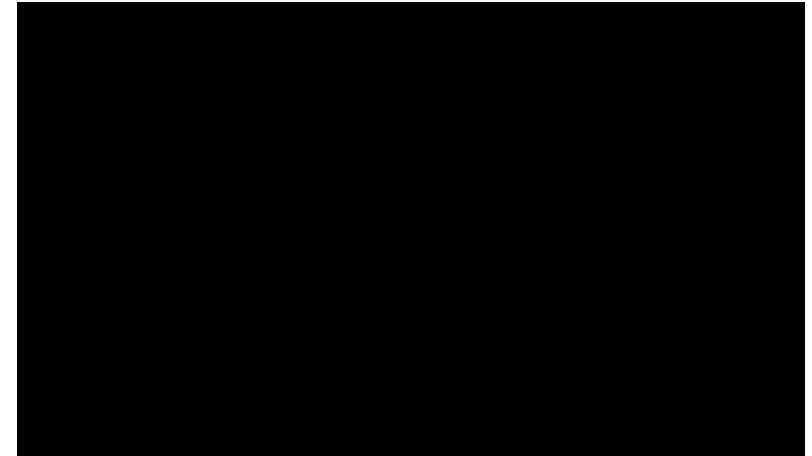
- Medilogic ® Telemetric System
- Randomized 3 legged cross-over study
- n = [116] non-athletic population
- 38 ♂, 78 ♀
- Group A: Ø/Tape/Brace
- Group B: Brace/Ø/Tape
- Group C: Tape/Ø/Brace
- Group D: Brace/Tape/Ø

Test series:

1. Plyometric Performance
2. Over-All Performance
3. Preventive Performance



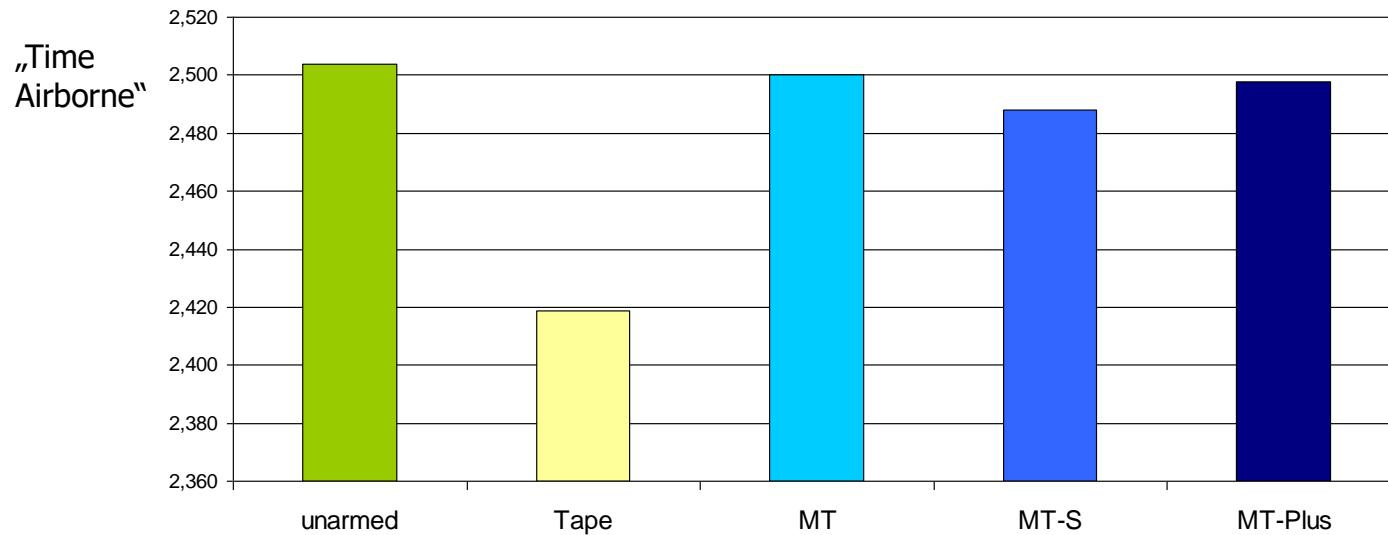
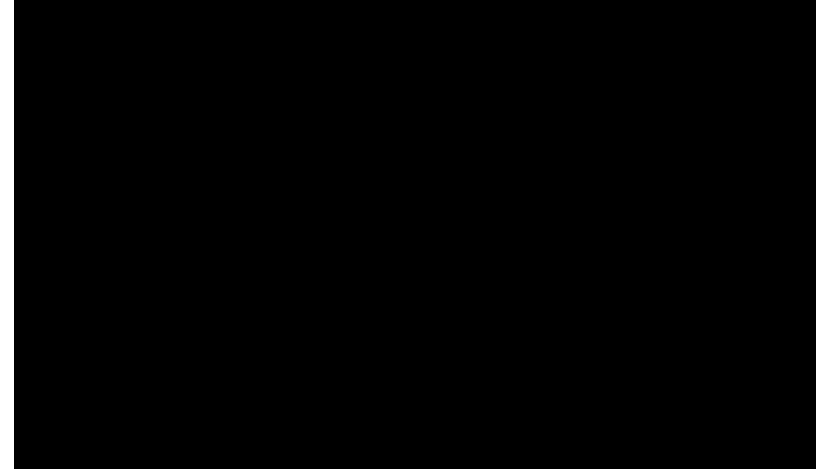
- **Blindfolded**
- **10° or no difference between steps**
- **Wedge angle range 5° – 45°**
- **3 possible answers: R > L, R = L, L > R**
- **Correct answer = 1, False answer = 0**



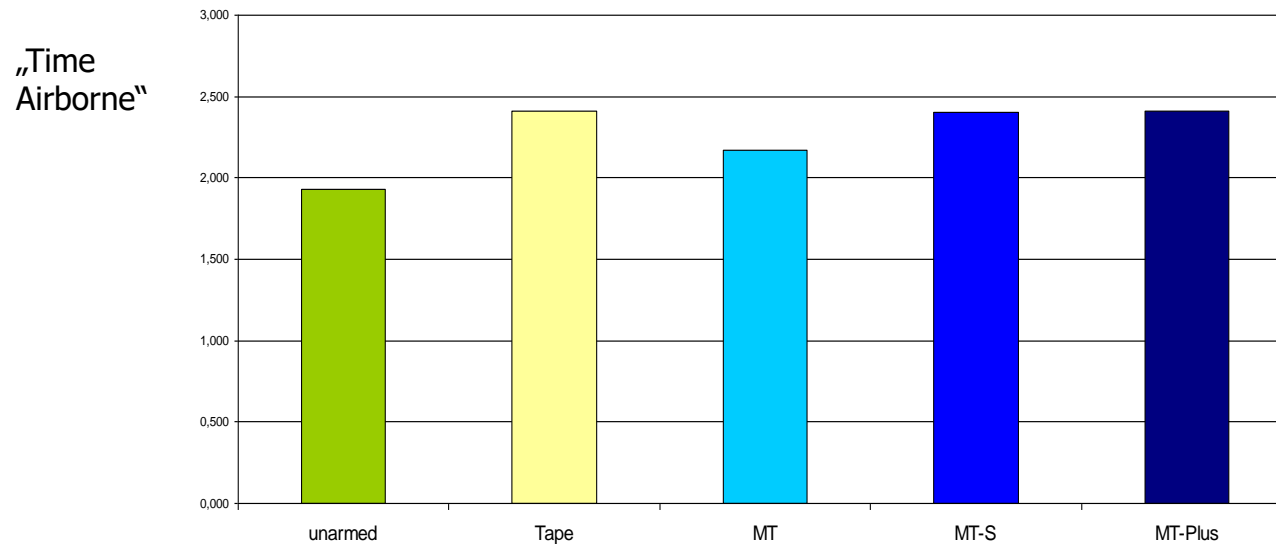
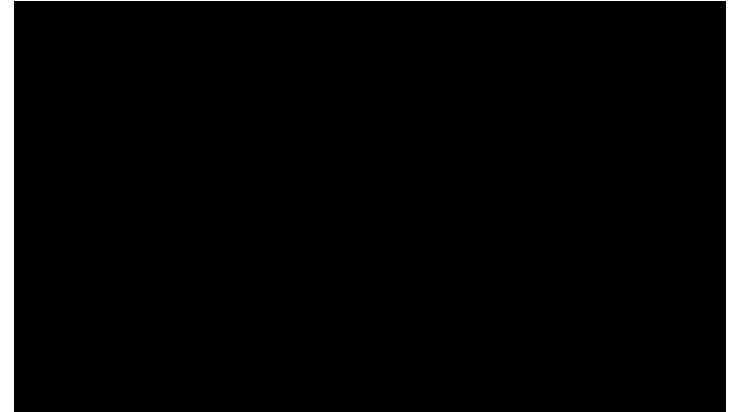
Significant loss of performance with tape

Coffman & Nitze, Greene et al., Burks et al., Paris, Beriau, MacKean et al., Hochman, Nowalkowski, Metcalfe et al., etc.

- **Maximum push offs on ramp**
- **13° slope**
- **Double-leg landing in 90° angle to the wall**



- Maximum push offs on ramp
- 13° slope
- Single-leg landing in 40° angle to the wall

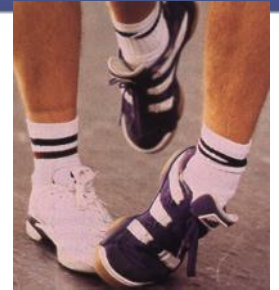


Studies: MalleoTrain

- O ´ Hara, Br J Sp Med 1992
- Ankle injuries from sporting, twisting or stumbling are the single most common form of minor trauma, causing impaired mobility
- Study design: randomized controlled parallel-group trial
- Trial size: 220 patients (118 MalleoTrain, 102 elastic tubular bandage control)
- Test parameter: pain self-assessment on a visual analogue scale, use of painkillers over 2 week treatment period



Studies: MalleoTrain



- Result: Pain score with MalleoTrain was consistently lower than with tubular bandage, while more patients were able to work normally. Patients using MalleoTrain used on average 60% less painkillers during the treatment.
- Conclusion: In patients with acute ankle symptoms, MalleoTrain use results in more rapid alleviation of symptoms.
- Limitations: Use of bandage not blinded to patients and doctors. Placebo effect cannot totally be excluded. Natural healing in the control group reduces statistical effects.

Studies: MalleoTrain



- Jongen, Geneeskunde en Sport, 1992
- Ankle inversion trauma is usually treated by applying tape, which can cause skin irritation and must be cared for in medical care institutions
- Study design: prospective randomized study
- Trial size: 100 patients
- Test parameter: subjective patient assessment of pain, swelling, resumption of work over 6-week period



Studies: MalleoTrain

- Result: MalleoTrain treatment was as successful as tape treatment
- Conclusion: MalleoTrain overcomes the disadvantages of taping while providing effective treatment
- Limitations: mainly subjective data used, no statistics performed



Studies: MalleoTrain



- Blandfort, Sportverl. Sportschad. 1991
- Comparison of MalleoTrain use for post-operative rehab or as a replacement therapy for surgery of various ankle conditions
- Study design: non-controlled multi-centre case cohort study
- Trial size: 350 cases with ankle injuries from various hospitals. Experiences with standard treatment of previous patients used as controls
- Test parameter: time to pain-free movement/standing or sick time

Studies: MalleoTrain

- **Result:** treatment with MalleoTrain in cases of acute ankle injuries resulted in earlier return to work and faster recovery to pain-free conditions compared to standard treatment (surgery, plaster cast)
- **Conclusion:** MalleoTrain can replace classical treatment with surgery and/or plaster cast in many ankle injury situations
- **Limitations:** no prospective grouping into treatment and control group. No statistical analysis.