

The Effectiveness of ESW for Patients Who Failed Surgical Release of the Plantar Fascia

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Background

- Patients who undergo endoscopic or open partial release of the plantar fascia for chronic fasciitis often have unsatisfactory results.
- They may return to the therapeutic and pharmacologic regimens used preoperatively
- These are rarely successful

Background

- FDA studies excluded patients who had previous surgery
- We evaluated the potential for ESW in patients with unsatisfactory results following surgery

Methods

- Patients were evaluated for
- Age,sex
- Types and numbers of treatments before surgery
- Duration of pain prior to surgery
- Type of surgery
- Patterns of any postoperative pain relief
- Patterns of postoperative weight-bearing
- Further treatment modalities
- Time between surgery and ESW

Methods

- Pain evaluation by treating physician
- Pain with morning walking
- Pain with activities of daily living
- VAS for each - must be >5.0 for all three pain categories

Methods

- Pain evaluations - baseline
- Pain evaluations - immediately preoperatively
- Pain evaluations - six and twelve weeks
- Patients encouraged to return at six and twelve months

Methods

- Treatment with electrohydraulic device (Ossatron)
- 20kV; 4 Hz
- Surgicenter
- Conscious sedation or general anesthesia
- Multidirectional shocks
- Heel manipulation

Methods

- At least a 50% reduction of VAS for “success” in a given pain category
- Excellent - 3/3
- Good - 2/3
- Fair - 1/3
- Poor - 0/3

Results

- 29 patients accepted (all unilateral)
- 17 male; 12 female
- Average age -37.9 yrs (28-49)

Previous surgery

- Time lapse from symptom onset to surgery - 17.3 mos
- Side: right -16; left - 13
- Endoscopic -21
- Open - 8

ESW

- Time lapse surgery to ESW - 11.8 mos (range 7 to 31 mos)
- No anesthesia complications
- No fascial rupture
- No neurologic complications
- No worsening of pre-ESW pain

Results

- Physician evaluated pain - 8.9 to 3.6
- AM pain - 8.6 to 4.1
- ADL pain - 7.9 to 3.8

Results

- Complete pain relief in all three categories in 7 patients

Results

- Excellent - 7
- Good - 12
- Fair - 3
- Poor - 7

Results

- Overall satisfaction in 19 of 29 patients (65.5%)

Conclusion

- Patients who have unsatisfactory results after endoscopic or open surgery have few options. ESW appears to have a positive effect in many of these patients, and allows a rapid return to compromised activities.

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