Hallux Valgus Surgery in Patients with Indoor Barefoot Life Style

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My disclosure is in the Final AOFAS Program Book.
I have no potential conflicts with this presentation.
Purpose

• Hallux Valgus (HV) Surgery
  – Results, often dissatisfied because of being short of understanding about their expectations.

- Bellacosa RA, J Foot Ankle Surg 1993
- Schneider W, Int Orthop. 2001

❖ To analyze expectations in Korean hallux valgus patients with Indoor barefoot Lifestyle
Materials & Methods

Surgical procedures
- Modified Ludloff osteotomy
- Akin osteotomy
- Distal soft tissue procedure

Clinical assessment
- AOFAS score
- Modified Questionnaire for patients’ expectation

Radiologic assessment
- Hallux valgus angle (HVA)
- 1, 2 intermetatarsal angle (IMA)

OUTCOMES
- Pain ↓ on regular shoe walking
- Pain ↓ in barefoot indoor activities
- Wearing shoes with narrow toe box
- Correction of deformity (cosmesis)
- Improvement in recreational sports activities.
Results

Questionnaire; Primary Expectation

- Pain improvement on regular shoe walking: 59.2%
- Wearing shoes with narrow toe box: 21.1%
- Correction for cosmesis: 12.5%
- Reduction of pain in barefoot indoor activities: 4.2%
- Better sports activity: 7%
# Results

## Questionnaire; 3 Most Important Expectations

<table>
<thead>
<tr>
<th>Expectation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain improvement on regular shoe walking</td>
<td>97.2%</td>
</tr>
<tr>
<td>Wearing shoes with narrow toe box</td>
<td>84.5%</td>
</tr>
<tr>
<td>Correction for cosmesis</td>
<td>60.6%</td>
</tr>
<tr>
<td>Reduction of pain in barefoot indoor activities</td>
<td>36.6%</td>
</tr>
<tr>
<td>Better sports activity</td>
<td>21.1%</td>
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</tbody>
</table>
Patient Number: 60 (71 feet)
Sex Ratio (M : F): 3 : 57
Age (years): 54.5 (range: 20~69)
Follow up Period: 35 months (24~48)

<table>
<thead>
<tr>
<th>Radiological &amp; clinical Results</th>
<th>Preop.</th>
<th>Postop.</th>
</tr>
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<tbody>
<tr>
<td>AOFAS Score</td>
<td>64 ± 7.7</td>
<td>88 ± 8.9</td>
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<tr>
<td>HVA (degree)</td>
<td>35.7 ± 7.2</td>
<td>9.2 ± 3.1</td>
</tr>
<tr>
<td>IMA (degree)</td>
<td>15.7 ± 2.9</td>
<td>6.3 ± 1.0</td>
</tr>
</tbody>
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**Subjective satisfaction**
- **Satisfied, overall 90%**
  - Improved pain during shoe walking (90%)
  - Wearing shoes with narrow toe box (87.3%)
  - Reduced pain in indoor barefoot activities (87.3%)
  - Improvement in foot appearance (74.6%)
  - Improved recreational activities (64.8%)
- **Dissatisfied (6 cases),**
  - Inadequate improvement of foot appearance (2)
  - Pain with walking activities (2)
  - Significantly reduced motion of great toe (1)
  - Unpleasant sensory change over surgery site (1)
  - Difficulty in postoperative management (1)
Discussion

- **Patient expectations**
  - Vary according to patient age and gender / Differ from those of surgeons
    - Schneider W, Int Orthop. 2001

- **Different expectations, in patients with indoor barefoot life style**

<table>
<thead>
<tr>
<th>Western</th>
<th>Patients, indoor barefoot life style</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced pain (over the bunion)</td>
<td>Pain improvement for regular shoe walking</td>
</tr>
<tr>
<td>Wearing (daily shoes)</td>
<td>Wearing shoes with narrow toe box</td>
</tr>
<tr>
<td>Improved walking</td>
<td>Deformity correction for cosmesis</td>
</tr>
<tr>
<td>Improved sport/fitness/health</td>
<td>Reduced pain on indoor barefoot activities</td>
</tr>
<tr>
<td>Wearing (dress shoes)</td>
<td>Improved sport/fitness/health</td>
</tr>
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</tbody>
</table>

| Cosmesis (Ranked at 8th, <5%)          | Cosmesis (Ranked at 3rd, 51%)          |
Understanding expectations between surgeon and patient for HV surgery is important.

- Expectations of patient with indoor barefoot lifestyle
  - More expectation in correction of foot appearance for cosmesis and wearing shoes with narrow toe box
  - Preoperative counseling about being aware of potential gap of satisfaction between surgeon & patient
  - May have an effect on selecting surgical options
    - Double osteotomies (Metatarsal + Akin osteotomy)
References


