RECREATIONAL SPORT ACTIVITY AFTER SUBTALAR ARTHRODESIS

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My disclosure is in the Final AOFAS Mobile App.

I have no potential conflicts with this presentation.
PURPOSE OF THE STUDY

EVALUATE THE RETURN AND THE LEVEL OF SPORT ACTIVITY
AFTER SUBTALAR JOINT ARTHRODESIS (STJA)

TALAR FRACTURES

OPEN REDUCTION INTERNAL FIXATION
ORIF

ORIF

SUB TALAR JOINT ARTHRODESIS
AFTER POST TRAUMATIC OSTEOARTRITIS
STJA

STJA
FEBRUARY 2007- JULY 2011    115 PATIENTS

33 PATIENTS IN THIS SERIES SATISFY THE DECISION CRITERIA

INCLUSION CRITERIA:

- ISOLATED STJA FOR POST-TRAUMATIC OSTEOARTHRITIS OF THE SUBTALAR JOINT
- ADULT PATIENTS AGE 18 TO 65 YEARS

EXCLUSION CRITERIA:

- DIABETES MELLITUS
- ACUTE OR CHRONIC INFECTIONS
- REUMATOID ARTHRITIS OR OTHERS AUTOIMMUNE DISORDERS
- NEUROMUSCOLAR DISORDERS
- SEVERE DEFORMITY OF THE FOOT
- OTHER SURGICAL PROCEDURE TO THE FOREFOOT OR REVISION SURGERY
- POLYTRAUMA
N° ISOLATED STJA: 33
AGE: 41,5 ± 10,9 YEARS (range 25-61)
BMI: 26,5 ± 4,6 kg/m2 (range 18-36)
FOLLOW UP: 43,9 ± 17,6 MONTHS (range 14-70)

ASSESSMENT

• AOFAS SCORE - FOOT FUNCTION INDEX (FFI)
• SF-36 HEALTH SURVEY QUESTIONNAIRE
• VISUAL ANALOG SCALE FOR PAIN (VAS PAIN)
• QUESTIONNAIRE SPORTS ACTIVITIES (WEEKLY SESSION NUMBER, SESSION TIME, TIME TO RETURN TO SPORT AFTER SURGERY)
## RESULTS

**Patients satisfied or very satisfied** (26) **79%**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>PRE STJA (SD)</th>
<th>POST STJA (SD)</th>
<th>p-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOFAS</td>
<td>37.6 (13.2)</td>
<td>79.8 (12.1)</td>
<td>p &lt; 0.01</td>
</tr>
<tr>
<td>FFI Pain</td>
<td>-</td>
<td>19.5 (21.4)</td>
<td>-</td>
</tr>
<tr>
<td>FFI Disability</td>
<td>-</td>
<td>17.5 (21.4)</td>
<td>-</td>
</tr>
<tr>
<td>Sport Sessions per Week</td>
<td>2.1 (1.2)</td>
<td>2.1 (1.3)</td>
<td>p = 0.07</td>
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<tr>
<td>SF-36 SUBSCALES</td>
<td></td>
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<td></td>
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<tr>
<td>Physical Functioning</td>
<td>49.8 (31.4)</td>
<td>72.8 (20.6)</td>
<td>p &lt; 0.01</td>
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<tr>
<td>Role Physical</td>
<td>34.0 (41.8)</td>
<td>53.0 (36.8)</td>
<td>p &lt; 0.05</td>
</tr>
<tr>
<td>Bodily Pain</td>
<td>34.7 (28.2)</td>
<td>58.1 (20.3)</td>
<td>p &lt; 0.01</td>
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<tr>
<td>General Health</td>
<td>58.6 (21.5)</td>
<td>63.9 (17.6)</td>
<td>p = 0.1</td>
</tr>
<tr>
<td>Vitality</td>
<td>52.4 (21.0)</td>
<td>67.1 (13.8)</td>
<td>p &lt; 0.01</td>
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<tr>
<td>Social Functioning</td>
<td>55.7 (27.2)</td>
<td>74.4 (15.9)</td>
<td>p &lt; 0.01</td>
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<tr>
<td>Role Emotional</td>
<td>41.2 (40.8)</td>
<td>60.4 (41.2)</td>
<td>p = 0.07</td>
</tr>
<tr>
<td>Mental Health</td>
<td>54.6 (20.9)</td>
<td>69.2 (14.2)</td>
<td>p &lt; 0.01</td>
</tr>
</tbody>
</table>
RESULTS

SPORTS AND RECREATIONAL ACTIVITIES BEFORE AND AFTER STJA

![Chart showing sports and recreational activities before and after surgery](chart_image.png)
RESULTS

48% NO ORTHOSES AFTER SURGERY
26% ORTHOSES AFTER SURGERY

NO ORTHOSES AT FOLLOW UP
ORTHOSES AT FOLLOW UP
PRE-OPERATIVE PARTICIPATION IN SPORTS 66.6%
POST-OPERATIVE PARTICIPATION IN SPORTS 72.7%

TIMING OF RETURN OF RECREATIONAL SPORT ACTIVITY

47.6% RESTART IN 90 DAYS
91.5% RESTART IN 1 YEAR

24.2% SWIMMING
24.2% CYCLING

DAYS LEGEND
Patients with a STJA returned to a good level of activity postoperatively. The duration of sports participation per session did not increase significantly after surgery (p=0.1).

Sport participation almost reached similar levels as preoperatively but with a shift from high- to low-impact activities (swimming - cycling). Discomfort from stiffness should be communicated to the patients before performing STJA.

GOOD RETURN OF SPORTS WITH MEDIUM OR LOW IMPACT OF THE FEET ON THE GROUND
REFERENCES


