Surgery for STT-osteoarthritis with STPI - a six year follow up study

David Eckerdal 1,2, Nina Vendel 3, Lars B. Dahlin 1,2, Marianne Nygaard 2, Niels Søe 4

1 Department of Translational Medicine – Hand Surgery, Lund University, Malmö, Sweden; 2 Department of Hand Surgery, Skåne University Hospital, Malmö, Sweden; 3 Department of Operation, Anaesthesiology and Day Care Surgery Q, Herlev and Gentofte, University Hospital, Denmark; 4 Handsection, Department of Orthopaedic, Herlev and Gentofte University Hospital, Denmark

Purpose
To evaluate the long-term outcome of surgical treatment of STT-osteoarthritis with the STPI implant.

Conclusion
Surgical treatment with the STPI result in a high patient satisfaction and should be considered as a option for treatment of STT-osteoarthritis.

Representing only 10% of clinical isolated osteoarthritis in the wrist, isolated osteoarthritis in the STT-joints is rare.

Patients and methods
• 18 patients => 23 procedures in 22 wrists.
• Patients treated with the STPI 2003-2009.
• Patients followed for 72 months.
• Outcome measured with VAS (Visual Analogue Scale), grip/ and pinch strength, range of motion, a modified version of the Mayo wrist score, as well as subjective patient satisfaction.

Surgical technique
• Oblique dorsal skin incision.
• Carefully retract radial nerve and artery.
• Expose joint and incise capsule at trapezium.
• Resect 3-4 mmm of the base of scaphoid.
• Insert implant and take dynamic X-ray.
• Close capsule by using a bone anchor.
• Cast for 4 weeks and orthosis 3 months

Previous follow up studies of the STPI have reported a limited number of treated patients with a shorter follow up time.

Results
• Most patients satisfied with outcome.
• The VAS score at rest, but not at activity, decreased.
• Grip and pinch strengths increased after the procedure.
• Range of motion or Mayo wrist score did not change after the procedure.