

The impact of psychological factors on outcome after salvage surgery for wrist osteoarthritis

Elin M Swärd MD^{1,2}, Gunilla Brodda-Jansen MD PhD³, Thorsten U Schriever MD^{1,2}, Mikael Andersson-Franko PhD¹, Maria K Wilcke MD PhD^{1,2}

¹ Karolinska Institutet, Department of Clinical Science and Education, Södersjukhuset, Stockholm, Sweden

² Department of Hand Surgery Södersjukhuset, Stockholm, Sweden

³ Karolinska Institutet, Department of Clinical Sciences, Division of Rehabilitation Medicine, Danderyd University Hospital, Stockholm, Sweden

The outcomes after wrist surgery are sometimes disappointing, even though the indications for treatment, choice of techniques, and postoperative rehabilitation protocols seem to be perfect. Lately, the possible impact of psychological factors on outcome after both rehabilitation and surgery has gained interest.

This prospective longitudinal study of 80 patients analyzes the effect of preoperative pain catastrophizing, anxiety, depression, and Sense of Coherence on the Disabilities of the Arm, Shoulder and Hand (DASH), Patient-Rated Wrist Evaluation (PRWE), quality of life, grip strength and objective function during the first year after salvage surgery for wrist osteoarthritis.

Generalized estimating equations were used to analyze the effect of the psychological factors on the outcome variables. Pain catastrophizing or anxiety preoperatively had a strong negative impact on postoperative Disabilities of the Arm, Shoulder and Hand and Patient-Rated Wrist Evaluation. Anxiety also predicted a lower postoperative quality of life, whereas pain catastrophizing had a negative impact on grip strength. Sense of Coherence did not influence the outcome.

Hand surgeons need to be aware of the negative impact of psychological factors on outcome. By identifying these patients, and giving them preoperative treatment, the results after surgery may improve.