# Additional operations following sacroiliac joint fusions: A minimum three-year follow-up cohort study of patients operated for chronic sacroiliac joint pain

Freyr Gauti Sigmundsson¹, Engelke Marie Randers², Thomas Johan Kibsgård², Paul Gerdhem³, Anders Joelson¹ Örebro Universitetssjukhus, ² Oslo Universitetssjukhus, ³ Akademiska sjukhuset

## Aims

To examine pattern of surgeries and outcome of sacroiliac joint fusions (SJF) in patients previously operated in the lumbar spine and those scheduled for primary SJF.

#### Methods

We used Swespine data on patients who underwent SJF between 1998 and 2019 and identified additional operations following a SJF. The EQ VAS and the Oswestry disability index (ODI) were recorded.

## Results

279 underwent SJF between 1998 and 2019. 95 of 279 (34%) underwent primary SJF and 184 of 279 (66%) underwent SJF after spine surgery. 41 of 95 (43%) underwent additional spine or SI joint surgery after a primary SJF. The most common additional procedure was contralateral SJF (22 of 41; 54%). The mean EQ VAS change after primary SJF was 19 points (95% Confidence Interval [CI] 12 to 26) whereas the corresponding value for SJF after previous lumbar spine surgery was 9 points (95% CI 2 to 16). The corresponding values for the mean ODI change were -14 points (95% CI -19 to -10) and -9 points (95% CI -14 to -4) respectively. 73% (37 of 51) of the patients were satisfied after primary SJF, whereas 54% (34 of 63) were satisfied after SJF after previous lumbar surgery.

# Conclusion

SJF is in 2/3 of the patients secondary to prior lumbar surgery. The most common additional procedure after a primary SJF is a SJF to the contralateral side. Patients operated with SJF without prior lumbar spinal surgery have better outcomes than patients where the SJF is secondary to lumbar spine surgery.