

## Pain Patterns in Young, Active Patients following Hip Arthroplasty

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**Introduction:** The purpose of this study is to determine the incidence, severity, and location of pain experienced by young active patients after hip arthroplasty utilizing pain drawings.

**Methods:** This multicenter study identified a cohort of young, active patients who were at least one year post SRA or THA. Young active patients were defined as males age 18-60, females age 18-55 with a pre-symptomatic UCLA score  $\geq 6$ . Potential participants were mailed a letter explaining the study and asking them to complete a questionnaire. Participants were asked to indicate whether or not they experienced pain and to what level in 8 anatomical areas of interest. Participants used a 0 – 5 pain scale, with 0 being 'No Pain' and 5 being 'Constant Pain'. Completed questionnaires were returned to their respective centers and de-identified data was sent to the coordinating center. For data analysis purposes, pain was considered to be 'mild' if scored with a 0 or 1 (no pain or pain only with extreme activity). Pain was considered to be 'moderate/severe' if scored between 2 and 5.

**Results:** Four hundred and thirty-three questionnaires were returned (224 SRA/209 THA) from two centers. Forty percent of patients reported pain in at least one area. There was no difference in groin pain as reported by both SRA and THA patients (SRA=70/224, 31%; THA=61/209, 29%;  $p=0.63$ ). THA patients reported more anterior thigh pain (SRA=18/224, 8%; THA=53/209, 25%;  $p<0.001$ ). In addition, anterior thigh pain was more severe for THA patients (Pain  $>1$ : SRA=7/224, 3%; THA=31/209, 15%;  $p<0.001$ ).

**Conclusion:** Many young, active patients experience some degree of pain after hip replacement when assessed with pain drawings. Patients with SRA and THA are equally likely to experience groin pain. THA patients experience significantly more anterior thigh pain with a surprising number having moderate or worse anterior thigh pain.

