following hip resurfacing arthroplasty is related to individual changes over time. Multilevel analysis is a useful approach to study repeated measures data with missing values.

**ARTHRITIS—Patient Reported Outcomes**

PAR32

**INVESTIGATION OF RESPONSE SHIFT IN HEALTH-RELATED QUALITY OF LIFE AMONG PATIENTS UNDERGOING TOTAL KNEE REPLACEMENT**

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**OBJECTIVES:** To investigate the presence and impact of response shift (RS) in HRQoL among patients undergoing total knee replacement (TKR) and explore factors associated with RS.

**METHODS:** HRQoL of TKR patients was assessed by SF-6D at 0-month (just before surgery: pre-test1), 6 months (pre-test2) and 18 months after surgery (post-test). At 18-month, HRQoL at 0-month and 6-month was evaluated again by “then-test” approach. RS was calculated as the score difference between corresponding pre- and then-test. Descriptive analysis was used for demographics, medical information and satisfaction with knee surgery (on a 0–10 Likert scale). Wilcoxon Signed Rank tests were used for comparisons of RS at 0-month and 6-month. Relationships between RS and external variables were investigated by Mann-Whitney, Kruskal-Wallis tests or Spearman’s correlation. Multiple liner regression (MLR) models were used to explore factors potentially impacting RS. Unless specified, median (interquartile range) was reported and significance level was set at 0.01.

**RESULTS:** Data were analyzed from 74 subjects [mean (SD) age 68.9 (7.9) years, 81% female, 92% with less than 12 years of education, 72% with acute and 68% with chronic illness, 10% with past knee surgery history, mean (SD) surgery satisfaction of 8.0 (1.3)]. SF-6D scores for then-tests at 0-month [0.48 (0.42, 0.49)] and 6-month [0.72 (0.66, 0.79)] were significantly different from respective pre-test scores [0.61 (0.58, 0.68) at 0-month, 0.69 (0.63, 0.72) at 6-month], both indicating presence of RS. RS at 0-month was significantly larger than that at 6-month. RS at 0-month was not affected by demographic or medical variables. RS at 6-month was greater in subjects with higher education (p < 0.01, 16% of variance in MLR).

**CONCLUSION:** RS was present and impacted HRQoL assessment among patients undergoing TKR both just prior to and 6 months after surgery. RS investigation is thus suggested to be performed during HRQoL evaluations.

**OSWESTRY HIP SCORE: A PATIENT ASSESSED TOOL TO MEASURE HIP FUNCTION**

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**OBJECTIVES:** The aim of this study was to validate Oswestry hip score which was developed as a patient-completed self-assessment to provide both Harris and Merle d’Aubigne hip score with added content to estimate hip range of motion.

**METHODS:** A total of 161 patients completed the Oswestry hip score, WOMAC Index, Harris hip score (HHS) and the Oxford hip score (OHS) at two different occasions. Validity was tested by comparing the domains of the Oswestry hip score to WOMAC, HHS and OHS. **RESULTS:** The reliability of this new score was established by the test-retest method. Cronbach’s alpha was 0.7, which is considered a good measure of internal consistency. Content validity of the Oswestry hip score was established by the validated domains of pain, function and range of motion of HHS and Merle score. Analysis of frequency of response distribution showed normal floor and ceiling effect for any of the domains of the Oswestry hip score. Multimethod multitrait matrix analysis was used to establish the construct validity of the Oswestry hip score. There was good correlation between pain and function domains (p < 0.001). Moderate correlation was found among clinical assessment of hip movement and movement domains of Oswestry hip score (Pearson’s r = 0.55; p < 0.001).

**CONCLUSION:** A positive construct validity and high correlation with WOMAC, Oxford Hip Score and Harris hip score shows that the Oswestry hip score can give an adequate measure of hip joint function. It can be completed by patients themselves and is therefore ideal for long-term and large scale collection of clinical outcome data.

**DIABETES—Clinical Outcomes Studies**

**GLYCEMIC CONTROL GOAL ATTAINMENT AMONG TYPE 2 DIABETIC PATIENTS WHO INITIATED ORAL COMBINATION THERAPY IN HUNGARY**

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**OBJECTIVES:** To assess the level of adequate glycemic control in real life practice settings in Hungary in adult patients with type 2 diabetes mellitus (T2DM) who added a sulfonylurea (SU) or glitazone (PPAR) to ongoing metformin(MF) monotherapy.

**METHODS:** Retrospective clinical chart reviews and patient surveys at the point of visit (January 2006–March 2007) were conducted in Hungary. Patients were ≥Y10 years of age at time of T2DM diagnosis and added a SU or PPAR to previous MF monotherapy irrespective of whether those drugs were discontinued afterwards. Information on A1C, medication use and co-morbid conditions was extracted from clinical charts, for up to a 7 month baseline period (MF monotherapy) and for a minimum of one year follow-up period (between therapy addition and date of survey). Glycemic goal attainment at A1C < 6.5% was assessed according to the IDF (2005) recommendations using the last available A1c value during follow-up.

**RESULTS:** In total, 401 patients (85% SU + MF and 15% PPAR + MF) of which 52.1% males, were recruited. For the SU + MF and PPAR + MF groups respectively: mean age was 61.0(SD = 9.3) and 57.9(SD = 11.4) years; duration of diabetes was 7.53(SD = 5.1) and 6.6(SD = 4.2) years; A1C during MF monotherapy was 8.4(SD = 1.6) and 7.6(SD = 1.4); A1C since combination therapy was 7.9(SD = 1.3) and 7.1(SD = 1.3). Patients at goal after addition of SU was 21.7% and 26.7% were at goal after addition of PPAR. In total, 14.2% initiated insulin since the addition of SU to MF, 3.3% initiated insulin since the addition of PPAR to MF.

**CONCLUSION:** Several differences were seen between the groups who added SU or PPAR to MF, including age, duration of diabetes and A1C values. In both groups, approximately three quarters of patients with T2DM failed to attain glycemic control goal since initiating oral combination therapy.