

Measuring Outcomes Comparing Total Hip Arthroplasty and Hemiarthroplasty using Oxford Hip Score in Neck of Femur Fractures Patients between 60 to 80 year olds – Retrospective Study





RAVENDRAN K.^{1, 2,} SHENOY R.¹ MISHRA P.^{1, 2,}

^{1,} East & North Hertfordshire NHS Trust ²Gradscape, London, United Kingdom

Introduction

- There are two options: hemiarthroplasty, which replaces the femoral head with a prosthesis, and total hip arthroplasty, which replaces the acetabulum and the femoral head with prostheses
- ❖ The Oxford Hip Score (OHS) is a self-administered, 12-item questionnaire that is specialized to the hip [7,8]. Due to its validity, responsiveness, and reliability, it has been extensively utilized as one of the main outcome measures for THA and function
- This study uses the Oxford Hip Score questionnaire to assess the function of those who had total hip replacement and those who underwent hemiarthroplasty between the ages of 60 and 80.







Methods

❖ A retrospective investigation was conducted at Lister Hospital.

Have you been troubled by pain from your hip in bed at night?

Total

Mean

3.24

(1.354)

38.69

(12.192)

[2.73 - 3.76]

[34.05 - 43.33]

- Patients (aged 60 to 80) who were hospitalized between January 1, 2020 and July 31, 2022 who had intracapsular neck of femur fractures were included. Patients were contacted again in August 2025,
- The study excluded patients who did not have hemiarthroplasty (HA) or total hip arthroplasty (THA).
- ❖ The statistical analysis was conducted using the IBM SPSS program version 22.0 (SPSS, USA).

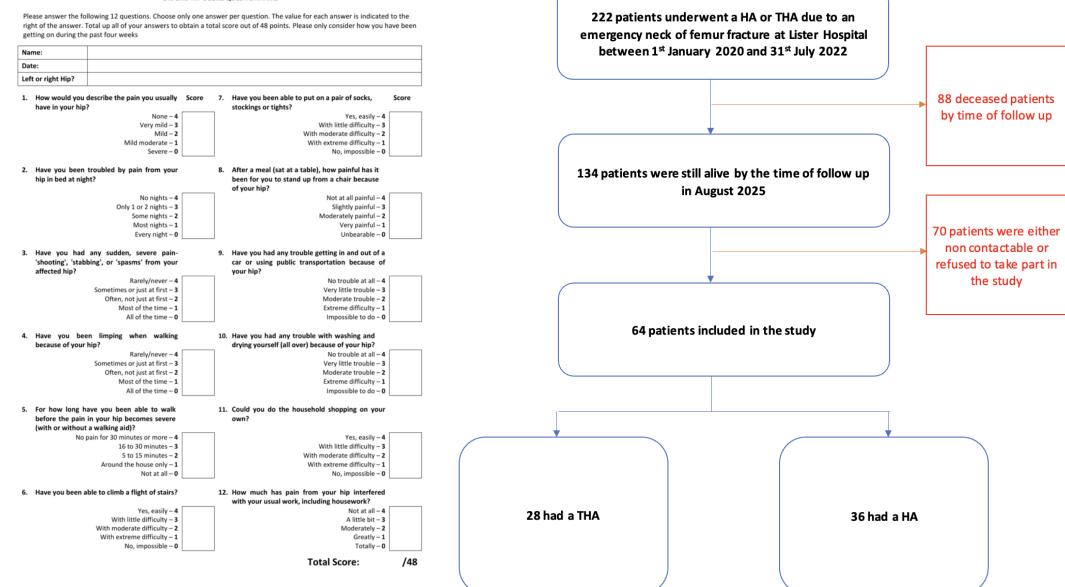
Grading for the Oxford Hip Score

<u>Score 0 to 19 - May indicate severe hip arthritis.</u> It is highly likely that you may well require some form of surgical intervention, contact your family physician for a consult with an Orthopaedic Surgeon.

<u>Score 20 to 29 - May indicate moderate to severe hip arthritis. See your family physician</u> for an assessment and x-ray. Consider a consult with an Orthopaedic Surgeon.

<u>Score 30 to 39 - May indicate mild to moderate hip arthritis.</u> Consider seeing you family physician for an assessment and possible x-ray. You may benefit from non-surgical treatment, such as exercise, weight loss, and /or anti-inflammatory medication

<u>Score 40 to 48</u> May indicate satisfactory joint function. May not require any formal treatment.



0.357

0.766

Results THA = 29 HA = 36 p-Value Gender Female = 23 (79.3%) Female = 25 (69.4%) Male – 6 (20.7%) Male = 11(30.6%)Mean Age at admission in years (SD)[95%CI] 70.34 74.44 0.002 (5.570)(4.736)[68.23-72.46] [72.84 - 76.05]ASA Grade (SD)[95%CI] 2.41 0.032 2.75 (0.733)(0.500)[2.14 - 2.69][2.58 - 2.92]Side of fracture Left = 16 (55.2%) Left = 20 (55.5%) Right = 13 (44.8%)Right = 16 (44.5%) Pre - op AMT score 9.97 8.78 0.026 (SD)[95%CI] (0.186)(2.789)[9.89 - 10.04] [7.83 - 9.72]0.28 0.46 0.543 Post – op 4AT score (SD)[95%CI] (1.306)(1.067)[-0.22 - 0.77][0.09 - 0.82]Mean operative time in Minutes 127.67 113.66 0.34 (SD)[95%CI] (10.3)(10.9)[117.87 - 139.43] [106.21 - 174.92] Mean time from admission to surgery in Hours 27.93 27.02 0.789 (SD)[95%CI] (13.06)(14.11)[22.96 - 32.90][22.24 - 31.79]Length of hospital stay in Day 8.62 10.17 0.145 (SD)[95%CI] (3.959)(4.379)[7.11 - 10.13][8.69 - 11.65]Reoperation 13 (44.8%) 7 (19.4%) HA- Mean (SD) [95%CI) THA- Mean (SD)[95%CI} p-Value During the past 4 weeks.. How would you describe the pain you usually had from your hip? 3.6 0.865 (1.336)(1.286)[2.49 - 3.51][2.62 - 3.49]Have you had any trouble with washing and drying yourself 3.52 0.711 3.42 (all over) because of your hip? (1.122)(1.052)[3.09 - 3.94][3.06 - 3.77]2.97 3.28 0.367 Have you had any trouble getting in and out of a car or using public transport because of your hip? (whichever you tend to use) (1.222)(1.424)[2.81 - 3.74][2.49 -3.45] 3.28 3.22 Have you been able to put on a pair of socks, stockings or tights? (1.222)(1.312)[2.81 - 3.74][2.78 - 3.67]3.24 Could you do the household shopping on your own? 3.08 0.672 (1.455)(1.519)[2.69 - 3.79][2.57 - 3.60]2.69 0.636 For how long have you been able to walk before pain from your hip 2.50 (1.628)becomes severe? (with or without a stick) (1.577)[2.07 - 3.31][1.97 - 3.03]Have you been able to climb a flight of stairs? 3.14 0.810 3.06 (1.302)(1.413)[2.64 - 3.63][2.58 - 3.53]3.17 0.569 After a meal (sat at a table), how painful has it been for you to stand 3.33 up from a chair because of your hip? (1.227)(1.042)[2.71 - 3.64][2.98 - 3.69]Have you been limping when walking, because of your hip? 2.86 3.03 0.682 (1.663)(1.576)[2.23 - 3.49][2.49 - 3.56]3.52 3.33 0.529 Have you had any sudden, severe pain - 'shooting', 'stabbing' or 'spasms' - from the affected hip? (1.056)(1.242)[3.12 - 3.92][2.91 - 3.75]3.28 0.855 How much has pain from your hip interfered with your usual work 3.28 (including housework)? (1.306)(1.344)[2.78 - 3.77][2.82 - [3.73]

Conclusion

3.53

(1.134)

37.81

(11.588)

[3.14 - 3.91]

[33.88 - 41.73]