

Average knee flexion at one-year was 136°. Two failures accompanied post-operative trauma.

Conclusion: The TransLateral approach allows excellent visualisation of the lateral femoral condyle, facilitating anatomic graft placement. Our results demonstrate good post-operative function.

1397: THE NATURAL ORIENTATION OF THE ACETABULUM IN ARTHRITIC HIP

Stuart Goudie, Kamal Deep. *Golden Jubilee National Hospital, Glasgow, UK.*

Introduction: Acetabular component orientation in total hip replacement (THR) is the single greatest factor that influences dislocation rate. Native acetabular orientation in healthy hips is well documented but that of arthritic hips is not.

Methods: A commercially available computer navigation system was used to assess acetabular inclination and anteversion in 65 hips with symptomatic arthritis requiring THR. Patient with DDH were excluded.

Results: All patients were Caucasian and had primary osteoarthritis, 29 males and 35 females. Average age 68(SD 8). Mean values as recorded by computer navigation were: inclination 51.4°(SD 7.1); anteversion 11.7°(SD 10.7). There was a difference between males and females. Mean navigated inclination: male 50.5°(SD 7.8); female 52.1°(SD 6.7). Mean navigated anteversion: male 8.3°(SD 8.7); female 14.39°(SD 11.6)

Discussion: Natural acetabular orientation in arthritic hips falls out with the safe zones defined by Lewinnek. When compared with healthy hips the arthritic hip appears to have a smaller angle of inclination and anteversion, by approximately 5° and 10° respectively, in both males and females. This is useful when positioning the cup during surgery. The difference between males and females, particularly in terms of anteversion, should also be considered.

1434: OUTCOME OF ANKLE ARTHRODESIS SURGERY – EXPERIENCE OF ONE CENTRE

Kohila Sigamoney, Saravana Karupiah, Sachin Yallappa, Sunil Yellu, Stephen Millner. *Royal Derby Hospital, Derby, UK.*

Introduction: Ankle arthrodesis has been a method used to improve symptoms and function in end - stage arthritis.

Aim: We aimed to look at the outcome of ankle arthrodesis in terms of clinical, symptomatic, functional and satisfaction outcome.

Method: Using hospital database patients were identified and retrospectively reviewed. These were patients who had ankle arthrodesis from March 2005 to January 2012. We looked at clinical notes to record demographics, union and progress, x-rays through PACS to measure and note radiological union. We then asked patients via telephone and questionnaire about their symptomatic and functional improvement and overall satisfaction.

Results: We had data from 97 patients. Mean age was 65.6 years. There was an average clinical union of 2.7 months. Of these, 66.7% showed radiological unions. 64.1% said that the surgery met their expectations and 82.1% were satisfied with the surgery with 41.0% saying that the surgery was very good. Based on MOXFQ, average walking/standing dimension score was 55.2, foot pain dimension score was 8.06 and a social interaction dimension score was 8.9. A modified AOFAS scale looking at pain and function showed a score of 38.5 (out of a maximum of 68).

Conclusion: There is a good outcome in ankle arthrodesis patients.

1435: EARLY RESULTS FOR IMPLEMENTING THE ENHANCED RECOVERY PROGRAM IN PRIMARY TOTAL KNEE REPLACEMENT

M. Ibrahim, E. Alkizwini, F.S. Hadad. *University College Hospital, London, UK.*

Background: There is growing interest in enhancing early mobilization and rapid recovery to facilitate early discharge after total knee replacement (TKR). The restrictions in health care budgets further necessitate shorter hospital stays to minimize costs.

We compared the traditional joint replacement pathway vs enhanced recovery protocol (ERP) in our institution.

Methods: Consecutive primary TKRs under 1 single surgeon were compared at two time periods (Jun-Sept 2010 and Sept-Dec 2012) with ERP(Gp 1) and without (Gp 2).

Statistical analysis was conducted with SPSS. Mann-Whitney U test was used to compare non-normally distributed data between groups.

Results: 70 patients were reviewed in total (35 in each group). Median age was 66 (Inquartile Range IR 15) years for group 1 and 67 (IR 12) for group 2

(P= NS). There were 8 males and 27 females in group 1 compared to 15 males and 20 females in group 2 (p = NS). Median length of stay for group 1 was 5 (IR 3) days compared to 6 (IR 3) days for group 2 (p= NS).

Conclusion: Early results showed a trend towards earlier discharge from hospital; however results were not statistically significant, which may be related to small sample size. This trend may have cost implications for healthcare institutions.

1499: VOLAR LOCKING PLATES FOR DISTAL RADIUS FRACTURES: USE AND ABUSE

Daniel Maruszewski¹, Thomas Ball², Niel Davis², Robert Poulter², Anmar Al-Shawi². ¹*Peninsula College of Medicine and Dentistry, Plymouth, Devon, UK;* ²*Royal Cornwall Hospitals Trust, Truro, Cornwall, UK.*

Locking plates have revolutionised treatment for distal radius fractures. However, proper reduction and technique remain as important as ever. We analysed the quality of fixation after patients had undergone DVR plating (Biomet, Warsaw, Indiana).

The operative technique states: “A properly applied plate should be just proximal to the watershed line and not project above or beyond it in order to avoid contact with the flexor tendons.” In addition, the plate should be in line with bone and the pegs of adequate length.

We surveyed all fractures fixed over a one-year period, using two blinded observers and a checklist of standards. Fixations were assigned to “good”, “acceptable” and “poor” categories.

There were 126 operations, 104 being good or acceptable. The most frequent error was a rotated plate (16 cases). Short pegs were also common (14) and were associated with fracture collapse. The plate was too proximal in 12 cases, which again was associated with fracture collapse.

Care is needed to place the plate in the centre of the radial shaft. This ensures the plate is not rotated, which places distal pegs correctly and supports anatomical reduction. The plate must be placed distally enough to support the articular surface.

PAEDIATRIC SURGERY

0287: DOES TIME OF DIAGNOSIS INFLUENCE OUTCOME IN PATIENTS WITH CONGENITAL TALIPES EQUINOVARUS?

Timothy Brock, Julie Allen, Rory Morrison, Antoine De Gheldere. *Royal Victoria Infirmary, Newcastle upon Tyne, UK.*

Aim: To determine if the time of diagnosis of congenital talipes equinovarus (CTEV) influences clinical outcome

Method: The study was a retrospective cohort study. A total of 47 patients with CTEV referred to the Royal Victoria Infirmary between 2003 and 2012 were included in the study. The patients were dichotomised into two groups based on time of diagnosis (gestational scan at 20 weeks or at birth). Initial treatment was by the Ponsetti method in all cases. The primary outcome measure was final Pirani score. Demographic details, comorbidities and tenotomy rates were also recorded. All data was collected from medical records.

Results: A higher number of patients were diagnosed pre-natally compared to at birth (26 vs 21). Bilateral cases were higher in the pre-natal group (50% vs 42.3%). The initial total Pirani score was higher in the birth group (4.3 vs 3.9; p=0.07); however, final Pirani scores were the same in both groups (0.5; p=0.86). The incidence of tenotomy was similar between groups (58% pre-natal, 61% birth; p=0.33).

Conclusion: The time of diagnosis of CTEV does not influence outcome, based on Pirani score and tenotomy rate. Overall, clinical outcomes are satisfactory in both groups after treatment.

0431: USE OF LAPAROSCOPIC APPENDICECTOMY (LA) IN A PAEDIATRIC POPULATION IN A DGH SETTING

Hema Sekhar, Alostair Konarski, Ashley Horsley, Christopher Smart, Borys Darmas. *Stepping Hill Hospital, Stockport, UK.*

Aim: The benefits of LA in the paediatric population remain undefined causing significant debate on its use. We aim to elucidate factors influencing the use of LA in children, and its effect on length of stay (LOS).

Method: A single-centre retrospective case-note analysis was performed from June 2008 to October 2012, on all children that underwent an appendicectomy.