patients who had undergone a functionally aligned RA-TKA. Post-operatively they were compared for differences in FJS, OKS, pain score, ROM, ability to ascend and descend stairs as well as knee. Results 101 matched pairs were eligible for final review. Both groups had significant improvements in FJS and Oxford Knee Score (OKS) following surgery. Pain and FJS had become equivalent at one year with all remaining measures being significantly better in the UKA cohort. At 2 years there was no significant difference between the UKA and TKA patients in any outcome measure observed. Conclusion Functionally Aligned RA-TKA and RA-UKA have both been shown to be successful treatments for knee arthritis in this study. The UKA group have superior results in the first year post-surgery, but there was no difference in outcomes between the two groups at 2 years. These outcomes should be considered when deciding appropriate treatment choice for individual patients in which either treatment could be utilised. Category: Knee - Arthroplasty

Two-Year Burden of Antibiotic Use for Prosthetic Joint Infection Following Total Knee Arthroplasty

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Summary: PJI patients spend 135.8 more days and $2138.9 more dollars on antibiotic use when compared to non-PJI patients. Data: Introduction: Prosthetic joint infection (PJI) is the most common indication for TKA revision and is associated with higher morbidity and mortality. In addition, it poses a substantial economic burden on patients and the healthcare system as it increases and lengthens hospital stays, requires long-term antibiotic therapy, and almost always needs at least one surgical intervention. Our study aims to estimate the total days and cost of therapeutic antibiotic use among patients with prosthetic joint infection (PJI) after total knee arthroplasty (TKA). Methods: We conducted an observational cohort study with a 2-year follow-up using the IBM Watson MarketScan Commercial Claims and Encounters Database. Patients with osteoarthritis who underwent primary TKA between January 1 and September 30, 2017, were included. Primary exposure was the diagnosis of PJI within 90 days post-TKA. The primary outcome was the days of antibiotic use, and the secondary outcome was the costs associated with antibiotics, both over the 2-year period post-TKA. Propensity score matching analysis was performed matching with patient and provider characteristics. Results: A total of 13,201 patients (female 59.0%, age 59.4 year period post-TKA. Propensity score matching analysis was performed matching with patient and provider characteristics. Results: A total of 13,201 patients (female 59.0%, age 59.4 years, and by the degree of alignment as follows: valgus 10 degrees or more, valgus 0-9 degrees, varus 0-9 degrees and varus 10 degrees or more. Results 597 subjects formed the study group and 557 completed PROMS at 12 months after TKA (84%), and were included in the analysis. There were 300 males and 308 right knees. The mean age was 68 years (range 33-92). The preoperative alignment was in varus in 426 (77%), neutral in 18 (3%) and valgus in 113 (20%). The varus group had significantly more females (63% vs 42%, p=0.001), an older mean age (70 vs 68 p=0.001), compared to the varus group. There was no difference between the valgus and varus group for baseline BMI, Oxford Knee Score or KOOS JR score. At 1 year after TKA 90% of valgus knees and 90% of varus knees reporting that they were satisfied or very satisfied with surgery (p=0.877), and 94% of varus knee and 95% of valgus knees reported there knee problems were better than before surgery (p=0.808). At 1 year the mean KOOS JRn score was 79 in both groups (p=0.983), and the mean Oxford Knee Score was 41 in the varus group and 40 in the valgus group (p=0.415). The varus outliers (10 degrees or more) had greater mean improvement (p=0.005) and a higher mean 1 year Oxford score than the other groups (p=0.032). A significantly higher rate of satisfaction with surgery (p=0.003) and proportion reporting they would undergo the same surgery again (p=0.029) was observed in the both the valgus and varus outliers (10 degrees or more) (97-100%) compared to those within 10 degrees alignment (88-90%). Conclusions Preoperative valgus deformity was observed in 20%, and predominantly affects females. Valgus deformity was not associated with inferior patient reported outcomes or lower rates of satisfaction, compared to varus knees at 1 year after arthroplasty. Those with preoperative coronal alignment of 10 degrees or more valgus or varus had the highest rates of satisfaction with surgery, compared to those within 10 degrees. Category: Knee - Arthroplasty

Valgus Coronal Deformity Does Not Adversely Affect Outcomes of Total Knee Arthroplasty

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Summary: Valgus deformity was not associated with inferior patient reported outcomes or lower rates of satisfaction, compared to varus knees at 1 year after arthroplasty. Category: Knee - Arthroplasty

Pre-Operative Patient Factors Can Predict Progression to Bilateral Knee Arthroplasty Within 7 Years

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Summary: One in three total knee arthroplasty patients progressed to bilateral total knee arthroplasty within 7 years of the index surgery, and progression could be predicted by pre-operative measures. Data: It is estimated that as many as 40% of patients who receive a total knee arthroplasty in the management of osteoarthritis return for a subsequent total knee arthroplasty in the contralateral knee within 10 years. The risk factors for a first total knee arthroplasty are well understood, but much less is known about the risk factors for patients who progress to bilateral knee arthroplasty. Identifying the risk factors associated with this progression may provide an opportunity for more thorough planning and expectation setting. All patients of a single orthopaedic surgeon who had undergone a total knee arthroplasty in the management of osteoarthritis were evaluated for inclusion in this study. Patients who had undergone a knee arthroplasty prior to their first documented surgery with this surgeon were excluded, as were patients who had undergone...