

Regression coefficient estimates using 4.9% gain to 4.9% loss as reference group

Variable	WOMAC Function	WOMAC Pain
Weight Change		
>10% reduction	4.07 (1.5, 6.7)	0.9 (0.1, 1.7)
5-9.9% reduction	0.1 (-1.9, 1.9)	0.3 (-0.9, 0.4)
5-9.9% gain	1.1 (-0.9, 3.1)	0.5 (-0.1, 1.2)
>10% gain	-5.4 (-8.7, -2.0)	-1.6 (-2.6, -0.5)
Base WOMAC	0.4 (0.3, 0.5)	0.5 (0.4, 0.6)
Sex	-1.6 (-2.9, -0.4)	-0.4 (-0.8, 0.1)
Comorbidity	-1.3 (-1.9, -0.6)	-0.3 (-0.6, -0.1)
Depression	-2.0 (-3.7, -0.3)	-1.0 (-1.5, -0.4)
Constant	-4.2 (-6.7, -1.7)	-1.7 (-2.6, -0.9)

patients with symptomatic knee OA that weight changes of >10% have potential to lead to appreciable changes in pain and function.

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IMPLANT SURVIVAL AFTER A TOTAL HIP OR KNEE REPLACEMENT IN CATALONIA UP TO FIVE YEARS OF FOLLOW-UP: A POPULATION-BASED REGISTER (RACAT)

C. Tebé-Cordomí^{1,2}, D. Prieto-Alhambra^{3,4}, V. Serra-Sutton^{1,2}, O. Martínez¹, A. García-Altés^{1,2}, M. Espallargues^{1,2}, F. Pallisó⁵. Advisory Committee of the RACat¹ Agència d'Informació, Avaluació i Qualitat en Salut, Barcelona, Spain; ²CIBER Epidemiologia y Salud Pública (CIBERESP), Barcelona, Spain; ³Inst. Català de la Salut – IDIAP Jordi Gol, Barcelona, Spain; ⁴NDORMS Dept., Univ. of Oxford, Oxford, United Kingdom; ⁵Hosp. de Santa Maria, Lleida, Spain

Purpose: The Catalan Arthroplasty Register (RACat for its acronym in Catalan language) was set up by the Catalan Society of Orthopaedic Surgery, the Catalan Health Service and the Catalan Agency for Health Technology Assessment and Research to collect information and to monitor the performance of all hip and knee replacement operations. Competing risk with death can lead to inaccurate estimates of failure rates if this is not taken into account in the analysis. This issue is particularly important in elderly populations. We used the information collected in the RACat to study the cumulative incidence of prosthesis failure accounting for death as a competing risk. Secondly, we also investigated differences in revision risk between the different types of prosthesis fixation: cemented vs hybrid vs uncemented.

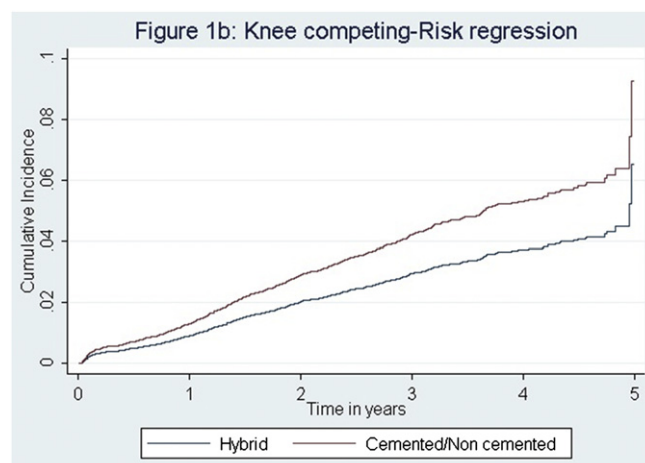
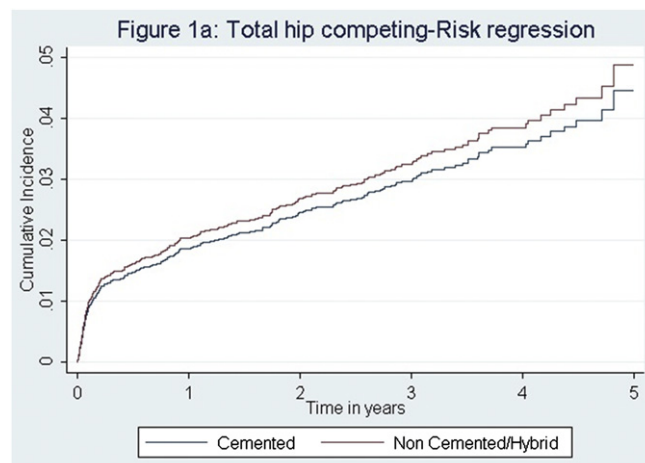
Methods: The RACat uses 4 sources of information: information provided ad-hoc by professionals from the hospital where surgery was carried out, the Central Insurance Register (RCA), the official national hospital discharge episodes database and companies that manufacture and distribute prostheses. Prosthesis survival is the main outcome measure used in the RACat and comprises the time elapsed between the date of primary arthroplasty and the date when first revision surgery (defined as any intervention involving the removal or replacement of any component of the prosthesis) was carried out (if any). Date of death was provided by the RCA register. Standard survival analysis based on Kaplan-Meier estimation was performed and a competing risks flexible parametric proportional hazards model was applied to treat death as a competing event. Age and gender-adjusted sub-hazard ratios for failure were calculated for each prosthesis fixation type using these same methods.

Results: The number of hip arthroplasties registered during the 2005–2010 period was 21,486, and corresponding revision arthroplasties accounted for 11.4% (n=2,658) of these. Overall total hip arthroplasty failures cumulative incidence rate at one year of follow-up was 2.1%(95%CI 1.8%–2.4%) rising to 3.1%(2.8%–3.5%) by year 3, and 3.9%(3.5%–4.5%) by year 5. Non-significantly lower rates were seen among cemented prostheses when compared to uncemented and hybrid prostheses: age and gender-adjusted SHR 1.09 [0.71 to 1.69]; p=0.686 [see Figure 1a].

A total of 33,165 total knee arthroplasties were registered in RACat in the same period, and revision arthroplasties accounted for 9.8% (n=3,240) of them. Overall knee revision cumulative incidence at one year after primary

surgery was 1.3%(1.2%–1.4%) rising to 3.8%(3.5%–4.0%) by year 3, and to 5.1%(4.6%–5.3%) by year 5. According to prosthesis fixation type, lowest rates were associated with hybrid prostheses when compared to uncemented and cemented: adjusted SHR 0.69 [0.56 to 0.85]; p<0.0001 [see Figure 1b].

Conclusions: We provide for the first time accurate estimates of prosthesis survival in a southern European region, taking into account death as a competing event. Future studies are needed in order to identify potentially different modifiable predictors of prosthesis failure in Southern vs Northern populations.



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DO WOMEN AND MEN WITH THE SAME DEGREE OF RADIOGRAPHIC KNEE OSTEOARTHRITIS EXPERIENCE SIMILAR LEVELS OF KNEE PAIN, FUNCTIONAL LIMITATIONS OR DISABILITY: THE MOST STUDY

N. Glass¹, N.A. Segal¹, K. Sluka¹, J.C. Torner¹, M. Nevitt², D.T. Felson³, C.E. Lewis⁴, L. Frey Law¹. ¹Univ. of Iowa, Iowa City, IA, USA; ²Univ. of California at San Francisco, San Francisco, CA, USA; ³Boston Univ., Boston, MA, USA; ⁴Univ. of Alabama at Birmingham, Birmingham, AL, USA

Purpose: Women with OA suffer more pain and functional limitations than men. However, they often have more severe radiographic OA, so that their greater levels of pain and functional limitations may be due to more severe disease. The purpose of this study was to determine whether, at the same level of radiographic knee OA grade, men and women significantly differ in severity of knee pain, functional limitations or disability.

Methods: Adults age 50–79 years with knee OA or known risk factors for knee OA were enrolled. Weight-bearing, fixed-flexed posteroanterior and lateral radiographs were graded using the Kellgren-Lawrence (KL) scale.