AGING OVER 60 population. Both cheaper and more effective than surgical intervention for this unique patient response often undergo unnecessary and costly surgery. This cost-effectiveness the patient had the largest effect on the outcome, with a threshold of greater than this period an increase of more than 68% was observed. The aggregate value of the expenditure in this field was US$411,330.01 for these years. CONCLUSIONS: The results show that the number of bariatric surgery has increased significantly in the last years. Therefore it’s necessary to conduct a cost-benefit analysis in the standpoint of the SUS. This analysis should consider the implications to the quality of live of patients when evaluating videoendoscopic bariatric surgery way.

PS66 COST-EFFECTIVENESS ANALYSIS OF TREATMENT FOR RECTAL CANCER FOLLOWING CLINICAL COMPLETE RESPONSE Rickles A1, Iannuzzi JC, Fleming F1, Francione TD, Dolan JG, Monson JR, Noyes K1 1University of Rochester, Department of Medicine and Dentistry, New York, NY, USA

OBJECTIVES: Total mesorectal excision (TME) in combination with neoadjuvant chemoradiation (CRT) therapy is the mainstay of rectal cancer treatment today. With the standard implementation of CRT, however, 15-30% of patients will have a complete response to CRT without evidence of residual cancer prior to surgery. Current standard of care remains to be subsequent surgery along with the associated risks of a stoma and operative morbidity. Some researchers challenge the current trends and suggest that these patients can be closely observed rather than undergoing surgery. Using decision analysis modeling we sought to determine the most cost-effective therapy for patients with rectal cancer who have clinical complete response (cCR): observation, local resection, or TME. METHODS: An extensive literature review was performed to determine the event rates, utilities and costs. Expert opinion was used when there were gaps in the literature. Cost-effectiveness analysis was performed to determine which variables had the largest influence on treatment decision. RESULTS: A non-operative approach dominated both local excision and TME for a cost-effective treatment. Observation without surgery provided 0.16 additional QALYs over a 5-year period when compared to local excision and was over $3,000 cheaper. Choosing to observe the patient saved nearly $17,000 compared to TME and added an additional 0.96 QALYs over 5 years. On sensitivity analysis the probability of a local or distant recurrence when choosing to observe the patient had the largest effect on the outcome, with a threshold of greater than 12% risk of local or distant recurrence changing the preferred decision to determine local excision. CONCLUSIONS: Rectal cancer patients with clinical complete response often undergo unnecessary and costly surgery. This cost-effectiveness model shows that choosing to observe patients with clinical complete response is both cheaper and more effective than surgical intervention for this unique patient population.

PS77 SEASONAL PERIODICITY OF SECONDARY HIP REPLACEMENT AFTER FEMORAL NECK FRACTURES WITH REDUCTION INTERNAL SCREW FIXATION AGED OVER 60 Sobesatyi A1, Gajdci J2, Patzai B3, Molics B2, Varga E4, Szandor P1, Boczaj J1,1South-Transdanubian Regional Health Insurance Fund Administration, Pécs, Hungary, 2National Health Insurance Fund Administration, Budapest, Hungary, 3University of Pécs, Pécs, Hungary, 4University of Debrecen, Debrecen, Hungary

OBJECTIVES: To evaluate the prognostic factors of secondary hip replacement following the primary reduction internal screw fixation of femoral neck fractures. METHODS: In this retrospective study the data derive from the database of the Hungarian National Health Insurance Fund Administration. The study includes patients over 60 years following primary reduction internal screw fixation of femoral neck fracture (S7200) discharged from inpatient care institutions in 2000. During the 8 years follow up period the data of secondary hip replacement were recorded. We evaluated the following risk factors: age, sex (male/female), type of primary femoral neck fracture (extracapsular, intracapsular undisplaced/intracapsular displaced), the season of primary treatment (spring, summer, autumn/winter), day of surgery (week/day/weekend), surgical delay (6-12h, 12-24h, 24h), and the absence or presence of comorbidities. The effects of prognostic factors were calculated by a proportional hazard regression analysis (HR, 95% CI, p) and the absence or presence of comorbidities. The effects of prognostic factors were calculated by a proportional hazard regression analysis (HR, 95% CI, p).

RESULTS: A total of 2784 patients with primary reduction internal screw fixation met the inclusion criteria. In the follow up period 6.82% (190 cases) of patients underwent secondary hip replacement, mainly due to osteoarthritis, nonunion and coxarthrosis. Significant correlation can be shown between suffering secondary hip replacement and the year (age, HR=0.968, CI 95.951-0.986), type of fracture (extracapsular undisplaced vs. displaced, HR=0.395, CI 260.601-0.601) and the season of primary surgical intervention (fall vs. winter, HR=0.505, CI 0.336-0.760 spring vs. winter, HR=0.626, CI 0.429-0.914 summer vs. winter, HR=0.613, CI 0.415-0.906).

CONCLUSIONS: The role of age and fracture displacement are well-known as risk factors in a literature, but the impact of winter season of primary osteosynthesis is unknown. In the future this result should be further investigated in the context of seasonal changes in vitamin D level and bone remodeling, focusing on decreasing the secondary treatment with high burden after femoral neck fractures with reduction internal fixation.

SURGERY - Cost Studies

PS88 BUDGET IMPACT ANALYSIS OF ANTI-BACTERIAL SUTURE USE IN APPENDICCTOMY PROCEDURES IN SPAIN Pobre MA1, Espallardo O2,3 1Johnson & Johnson Medical, Madrid, Spain, 2Johnson & Johnson Medical, Madrid, Spain, 3Johnson & Johnson Medical, Madrid, Spain

OBJECTIVES: Surgical Site Infection (SSIs) is the most frequent type of hospital-acquired infection, accounting for more than (37%). The prevalence of hospital-acquired infection in Spain is 7.8%, where SSI account for 19%. For appendectomy procedures, the SSI rate of 4% is the lowest; however, the risk of morbidity and mortality, prolongs hospital stay by more than a week, and worsens the overall patient quality of life. Moreover, the risk of SSI has increased recently due to multiple comorbidities. In addition, SSI is becoming more treatment-resistant than ever. The aim of this study was to analyze the economic consequences of using antibacterial sutures in appendectomy procedures in Spain. METHODS: A dynamic excel-based decision-analytic model was developed. Published literature reviews were used to estimate the three key variables: SSI reduction using antibacterial sutures (€597) compared to standard sutures, prolonged length of hospital stay due to SSI (7.7 days), and the cost of hospital stay per day (€205). The rate of readmission due to persistent infection was used (18%), which was estimated as costs €2166, and it was added to the prior amount to calculate total costs of infection. Country input data for the model were reported as the number of appendectomy procedures performed per year (34,500). The list price at which regular and antibacterial sutures were purchased was also collected. A two-way sensitivity analysis was conducted, with two variables being the infection rate and surgery price. RESULTS: Antibacterial sutures were found to be 14% more expensive; however allowing a 56% of hospital cost avoidance. This may have an impact of €4,970,274 in annual savings in Spain. CONCLUSIONS: This analysis presents new evidence of support of the use of antibacterial sutures by demonstrating that it could reduce the SSI rate, and could allow cost-savings compared to standard sutures, among other benefits.

PS99 BUDGET IMPACT OF AUTOGRAFT HARVEST, BONE GRAFT SUPPLEMENTS AND ORTHOBIOLGIC BONE GRAFT SUBSTITUTE IN FOOT AND ANKLE FUSION PROCEDURES Abdi NA1,2, compared A3, Harris E 1Santa Cruz Orthopaedic, Capitola, CA, USA, 2Data Intelligence Consultants, LLC, Eden Prairie, MN, USA, 3BioMimetic Therapeutics, Inc., Franklin, TN, USA

OBJECTIVE: No multicenter studies currently assess the incremental costs of autogenous bone graft harvest (autograft) in foot and ankle procedures. This study applied conservatively estimated incremental costs of autograft (with and without bone graft supplements/enhancers) using an interactive budgetary impact model comparing costs and cost offsets of an orthobiologic bone graft substitute (P6-TCP with recombinant human platelet derived growth factor-BB (rhPDGF-BB). METHODS: A hospital-based budget impact model was developed utilizing International Society of Pharmacoeconomics and Outcomes Research (ISPOR) guidelines. Clinical and health economic literature was utilized to assess a 434-patient cohort dataset. Data was collected from ten experienced orthopaedic surgeons provided estimates of medical resource utilization and associated hospital costs. Model parameters were confirmed by six individuals representing 15 Canadian hospitals. RESULTS: Autograft carries incremental costs related to operating suite time (57.9 ± 17.0 minutes for an iliac crest donor site and 22.1 ± 21.6 minutes for local donor sites), recovery room time (25.0 ± 12.3 minutes for iliac and 3.5 ± 9.4 minutes for local), and donor site complications. Conservative base case incremental costs were €1,601(CAD) for iliac crest and €755 (CAD) for local donor sites. Complications at the harvest site contributed an additional base case cost of €414 for iliac crest and €182 for local sites. Use of an orthobiologic bone graft substitute had higher acquisition costs, but yielded per-case and annualized cost savings (€342 and €4,454, respectively, base case) by eliminating incremental costs of harvest complications, and patient pain reported for autograft harvest during clinical trial. CONCLUSIONS: The gold standard of autogenous bone graft as an adjunct to foot and ankle fusion surgery is associated with significant health care costs. The use of p-TCP with rhPDGF-BB eliminated variable, incremental hospital costs associated with bone graft harvesting and treating related complications.

PS10 COSTS OF CARDIOVASCULAR READMISSIONS FOLLOWING PERCUTANEOUS CORONARY INTERVENTION IN PATIENTS WITH CHRONIC KIDNEY DISEASE: DATA FROM A LARGE MULTI-CENTRE AUSTRALIAN REGISTRY Arora SP1,2, Aihara K2, Duffy C2,3,4,Andreasen NL2,4, Billah B5, Brennan AL1, Clark DJ1, New G2, Black A6, Ajanzi AE7, Yan BP1, Reid CM1,1Monash University, Melbourne, Victoria, Australia, 2University of Melbourne, Melbourne, Australia, 3Afford Hospital & Monash University, Melbourne, Victoria, Australia, 4Box Hill Hospital, Melbourne, Victoria, Australia, 5Geelong Hospital, Geelong, Victoria, Australia, 6Royal Melbourne Hospital, Melbourne, Victoria, Australia, 7Prince of Wales Hospital & Monash University, Hong Kong, Hong Kong, China

OBJECTIVES: Chronic kidney disease (CKD) and end-stage kidney disease are well-established risk factors for early mortality and morbidity in patients with coronary