Paper #14

Does Smoking Cessation Prior to Elective Total Joint Arthroplasty Result in Continued Abstinence?

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Introduction: Smoking tobacco is a common modifiable risk factor for complications in total joint arthroplasty (TJA) patients. It is common practice to require patients to quit smoking prior to TJA. After the early postoperative period, little is known about the long-term implications of this preoperative behavioral change. Our aims were to 1) identify TJA patients that had negative nicotine screen prior to elective TJA and 2) determine the long-term rates of continued nicotine abstinence following their procedure.

Methods: At our institution, TJA patients who self-report tobacco use undergo urine anabasine testing prior to surgery. Between 2009 and 2018, all patients that had elective primary TJA with preoperative urine anabasine tests were queried. Patients were called postoperatively to discuss tobacco use at mean 51 months (range 15 – 126 months). Long-term smoking cessation rates were then analyzed along with relapse time frame. Additional analysis explored the use of quit aid and patient perspective on importance of quitting.

Results: 250 smokers that had elective TJA were identified, and 124 (50%) participated in the survey. 31 patients had already quit in the time leading up to surgery, and 93 patients quit specifically to facilitate surgery. Of those 93 that quit for surgery, 21 (23%) never resumed smoking, and 31 (33%) maintained abstinence >3 months. Almost half of the patients began smoking in the acute postoperative period (44%). There were no differences in quit aid or patient perspectives between these groups.

Conclusions: With an increased focus on smoking cessation prior to elective TJA, orthopaedics contributes to an important public health initiative. Although national quit rates in the general public are in the single digits, 56% of our patients remain smoke free for at least 3 months after surgery and 23% of patients were able to quit for good.

Notes