

329

A POPULATION BASED STUDY OF INCIDENCE AND TREATMENT OF BENIGN PROSTATIC HYPERPLASIA AMONG RESIDENTS OF OLMSTED COUNTY, MINNESOTA: 1987-1997. *A. V. Sarma, S. J. Jacobsen, D. J. Jacobson, R. O. Roberts, M. M. Lieber. (University of Michigan, Ann Arbor, MI 48109)

Introduction: The treatment of benign prostatic hyperplasia (BPH) has changed dramatically during the last decade, from traditional surgery to less invasive therapies. The objective of the current study was to describe the incidence of and treatment for BPH among residents of Olmsted County, Minnesota. **Methods:** Incident cases of and treatment for BPH from 1987 to 1997 among male residents of Olmsted County, Minnesota were identified using the Medical and Surgical Indices, made available through the Rochester Epidemiology Project. **Results:** Over the 10-year period, 2330 cases of BPH were identified representing an age-adjusted cumulative incidence of 854.71 per 100,000 men. The incidence of BPH decreased over the 10 year period for the entire cohort by approximately 25% ($p = 0.002$), from 727.11 per 100,000 to 546.31 per 100,000. 2213 of the 2330 (95%) incident cases of BPH received no treatment (watchful waiting) at the initial physician visit in which BPH was mentioned, while 48 (2%) and 67 (3%) men received surgical and pharmacologic treatments, respectively. These percentages shifted throughout the study period, however, with watchful waiting and surgery changing from 94% to 91% ($p < 0.001$) and 6% to 0.6% ($p < 0.0001$), respectively. By contrast, the percentage receiving pharmacologic therapy increased from 2% to 9% ($p < 0.0001$). **Conclusion:** While BPH has long been considered a surgical condition with surgery as the primary therapeutic modality for the condition, it is clear that the advent of alternatives to surgery, have had a significant impact on treatment trends for BPH in the last decade.

331-S

ASSOCIATIONS BETWEEN BODY MASS INDICES AND SURGERIES FOR ROTATOR CUFF TENDINITIS. *AM Wendelboe, KT Hegmann, LH Gren, SC Alder, GL White, and JL Lyon (University of Utah, Salt Lake City, UT, 84108).

Rotator cuff tears are the most common tendon ruptures in the body. Rotator cuff related problems are second to lower back as the most costly in many workers' compensation systems. Due to biomechanical and systemic risk factors, we hypothesize that obesity increases the risk of having rotator cuff related surgeries. A frequency matched case-control study in Utahns was conducted in which 311 patients (ages 53-77) who had undergone rotator cuff repair, arthroscopy, and/or other repairs of the shoulder from 1992-2000 were included. Cases were matched to 1,605 controls, randomly drawn from 10,943 potential controls. Controls were Utah residents enrolled in a large cancer screening trial. Mantel-Haenszel age adjusted odds ratios (OR) stratified on sex were calculated using ICD-9 procedural codes and body mass index (BMI) groups. Regression analyses were also performed. There was an association between increasing BMI and shoulder repair surgery. The highest ORs for both males and females were for those $\geq 35.0 \text{ kg/m}^2$ (males: OR = 3.13, 95% CI = 1.29, 7.61; females: OR = 3.51, 95% CI = 1.80, 6.85). Tests for trend were also significant for both genders (males: $p = 0.002$; females: $p \leq 0.001$). Regression analysis also indicated a statistically significant association between increasing BMI and shoulder surgery ($B = 1.57$, 95% CI = 0.97, 2.17, $p \leq 0.001$). This case-control study demonstrated an association between obesity and shoulder repair surgeries in men and women aged 53-77. By using surgery as proxy for rotator cuff tendinitis, these results suggest that increasing BMI contributes to rotator cuff tendinitis and related conditions in this population.

330-S

PREDICTORS OF PROGRESSION OF PERIPHERAL NEUROPATHY. *S.G. Sheth, C. Sumner, D. Cornblath, J. Griffin, V. Chaudhry, and M. Polydefkis. (Johns Hopkins School of Medicine, Baltimore, MD 21205)

Peripheral neuropathy is a common neurologic disorder affecting approximately 8000 per 100,000 adults. Little is known about the factors affecting the progression and severity of sensory predominant peripheral neuropathy for which no etiology is identified. To determine the effects of age and duration of neuropathy on the progression of sensory predominant peripheral neuropathy, we conducted a cross-sectional study at the Neuromuscular clinic, Outpatient center, Johns Hopkins Hospital, Maryland, USA. 142 patients with clinically confirmed sensory predominant peripheral neuropathy of unknown etiology were identified. The patients' neuropathy was classified based on the nerve conduction, EMG and skin biopsy results as predominantly small fiber sensory neuropathy (PSSN), mixed (small and large fiber) sensory neuropathy (MSN) and mixed sensorimotor neuropathy (MSMN). All patients were prescribed an oral glucose tolerance test to detect subclinical form of glucose dysmetabolism. Of the 142 patients, 84 completed their testing. Ordered logistic regression was performed to determine the association of different predictors with the increasing severity of peripheral neuropathy. Odds of having higher form of neuropathy increased by 11% with each year increase in the duration of neuropathy (range: 1 - 23%) and by 25% with every 5 years increase in the age at onset of neuropathy (range: 2 - 54%). Diabetes had 2.6 times higher odds of having severe form of neuropathy (range: 0.76 - 9.05) as compared to impaired glucose tolerance status. Duration of neuropathy symptoms and the age at onset of neuropathy emerged as the independent predictors of neuropathy severity. Although the severity of neuropathy seemed to be associated with the severity of glucose dysmetabolism, the inference is limited by the data not being representative of patients with diabetic neuropathy.

332-S

IMPACT OF A HYGIENE INTERVENTION ON ILLNESS IN CHILD CARE CENTERS: PHASE III. L.A. Strazdas, U. Rawiel, *D.L. Bronson, P.A. Orosz-Coghlan, C.P. Gerba, and M.D. Lebowitz (University of Arizona, Tucson, Az, 85721).

The objective of this intervention study was to assess the effect of certain sanitizing products and cleaning protocols on the incidence of respiratory and diarrhoeal illness, antibiotic use, and physician visits among children attending child care centers. The 10 week Phase III of this study began in February 2002. Twelve centers were involved, half randomly assigned to the intervention group. Intervention centers were given a protocol to follow that indicated how and where to use the provided products. Control centers were neither provided with cleaning products nor asked to change their cleaning procedures. Acute illness was determined via records kept by the center directors and telephone calls were made to the parents of ill children (one random call was made to a healthy child's parents for every two ill children called). A total of 1289 telephone interviews were completed (90%) to the parents of 482 children. Additionally, a self-administered questionnaire was distributed to the parents requesting information like bedroom sharing status, exposure to environmental tobacco smoke, and an assessment of chronic illnesses; 440 (90%) were returned. Intervention group children were 10% less likely to experience a respiratory illness, 37% less likely to experience diarrhea, and 36% less likely to use antibiotics. They were also 17% more likely not to have any acute symptoms than children in the control group. Multiple logistic regression showed that children in the intervention group were at a significantly lower risk for diarrhoeal illness and antibiotic use than were children in the control group, adjusting for other factors.

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