Re: Association between Benign Prostatic Hyperplasia, Body Mass Index, and Metabolic Syndrome in Chinese Men

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Abstract available at http://www.ncbi.nlm.nih.gov/pubmed/25677137

Editorial Comment: The literature is now replete with numerous studies citing the association between metabolic syndrome (MetS) and various parameters of benign prostatic hyperplasia. It appears that prostate volume is related to MetS and in particular central obesity. Various factors have been postulated including the role of hyperinsulinemia and insulin resistance in sympathetic nerve activity. This may lead to changes in insulin-like growth factor with a downstream alteration of various apoptotic processes within the prostate.

This study offers a similar observation in Chinese men. MetS was associated with larger prostate volumes and various objective parameters including flow rate and post-void residual urine. Interestingly in a group of men defined as having MetS mean baseline body mass index was 27.3 and mean waist circumference was about 36 inches. In addition, in the MetS group baseline prostate volume was 31 gm. Clearly definitions and criteria for MetS, body mass index and waist circumference associated with obesity as well as prostate parameters vary by region. The role of Western diet and decreasing physical activity in large populations throughout the world has contributed to this phenomenon. Even in Asian regions prostate health and diseases are evolving. What was once an area recognized for having “smaller” prostate volumes is evolving. I suspect that in the ensuing decades there will be alignment of the incidence and prevalence of prostate diseases (as well as other metabolic dysfunctions) throughout the world. Clearly the medical community must take educational as well as lead advocacy for implementing proactive and preventive measures including changes in what we eat, with emphasis on a relatively low fat and plant based diet with ensuing decreases in body inflammation.

Suggested Reading

Kupelian V, McVary KT, Kaplan SA et al: Association of lower urinary tract symptoms and the metabolic syndrome: results from the Boston Area Community Health Survey. J Urol 2009; 182: 616.

Re: 5-Alpha-Reductase Inhibitors and the Risk of Diabetes Mellitus: A Nationwide Population-Based Study

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Dochead: Urological Survey  LIT 5.4.0 DTD  ■  JURO14269_proof  ■  16 December 2016  ■  6:33 pm  ■  EO:
Abstract available at http://www.ncbi.nlm.nih.gov/pubmed/26390988

Editorial Comment: 5-Alpha reductase inhibitors (5-ARIs) such as finasteride and dutasteride have been around for more than 25 years. Their efficacy and safety profile has been well established, with primary adverse events related to sexual dysfunction. More recently the potential association between decreased androgens and the risk of type 2 diabetes (DM) has been reported. Given that 5-ARIs result in decreased production of dihydrotestosterone, it is plausible that use of these agents may be related to DM.

This study compared a group of 1,298 Taiwanese men with benign prostatic hyperplasia (BPH) who had used more than 28 cumulative and defined daily doses of 5-ARIs and compared them to 12,887 men who did not. The length of observation was between 2003 and 2008. The results were unexpected in that 5-ARI use had an almost protective effect against DM, with DM developing in 3.5% of men on 5-ARIs in contrast to 5.5% of controls. This observation was even more pronounced in men older than 65 years. It is noteworthy that in the REDUCE (Reduction by Dutasteride of Prostate Cancer Events) trial, which excluded men 75 years or older, there was no increase in DM in the dutasteride group. It is also noteworthy that in the Taiwanese health system use of 5-ARIs is regimented, resulting in a relatively homogeneous BPH population, i.e., men with larger prostates and bladder outlet obstruction. Moreover, it has been reported that DM is associated with larger prostate volumes. Is it possible that reduction of dihydrotestosterone has an ameliorative effect on diabetic parameters?

There are a number of limitations in the study noted by the authors, such as the role and significance of other confounding variables including various parameters of metabolic dysfunction (weight, waist circumference, etc). Nevertheless, the association between BPH therapy and the potential role of altering the arc of other diseases warrants further exploration.

Suggested Reading

Norman RW, Coakes KE, Wright AS et al: Androgen metabolism in men receiving finasteride before prostatectomy. J Urol 1993; 150: 1736.

Re: Postoperative Lower Urinary Tract Storage Symptoms: Does Prostate Enucleation Differ from Prostate Vaporization for Treatment of Symptomatic Benign Prostatic Hyperplasia?

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Abstract available at http://www.ncbi.nlm.nih.gov/pubmed/25905430

Editorial Comment: How often have we done a prostate procedure, whether by laser or electro-surgery, and been satisfied that we have done an adequate resection, and yet the patient complains of bothersome postoperative storage symptoms, most notably urgency and frequency? Is it the nature of what we do, of how we do it or of how much tissue we remove?

In this retrospective study 809 men who underwent holmium laser enucleation of the prostate (HoLEP) and 291 who underwent GreenLight™ laser photoselective vaporization of the prostate (PVP) were compared. The results suggest that for HoLEP symptom improvement as measured by the International Prostate Symptom Score (IPSS) was better than PVP at all time points measured. The storage subscore was higher postoperatively for PVP and needed 6 months to equilibrate with HoLEP. It is noteworthy that predictive factors for a more prolonged recovery for storage symptoms include increased baseline IPSS storage symptom subscores (9 of 15 or higher), operative time longer than 100 minutes and lower percent postoperative prostate specific antigen reduction regardless of laser used.

There are a number of obvious concerns with the data but there are some important take home messages. Given the almost 3-to-1 preference for HoLEP vs PVP in this study, one would suspect a greater degree of commitment and proficiency with that technique and one would anticipate better results. Moreover, using the IPSS as a metric for storage symptoms is suboptimal. Either a voiding