Spreading men’s health

Department of Urology, Teikyo University, Tokyo, Japan
Shigeo Horie

Currently, Japanese has achieved excellent longevity in the world. The contributing factors to this longevity would be the introduction of universal coverage of health insurance, high prevalence of regular health check-up in the working place and community, and the ubiquitous availability of medical resources. However, a persistent longevity gap still exists between men and women in Japan. In fact, men’s life expectancy has been shorter than female for 7-8 years, which is mediocre level among nations in the world. We are obliged to admit that men’s health is much poorer than it need be. To improve men’s health, collaboration between interested organizations and individuals has been developed in the world. I would like to raise two major health issues of Japanese male for the improvement of Men’s Health.

Testosterone, a general health biomarker for men: Previous research suggests that low serum testosterone levels are associated with multiple risk factors for cardiovascular disease, including hypertension, abdominal obesity, insulin resistance, thrombosis, and inflammatory markers. Thus, low serum testosterone levels are associated with medical conditions that are themselves associated with significant morbidity and increased mortality. Assessment of individual testosterone level might contribute to the promotion of men’s health in Japan. We urologists should strive to enlighten lay peoples on the evidence of testosterone as a general health biomarker.

Literacy to prevent life-style diseases: Life-style diseases, such as erectile dysfunction, metabolic syndrome, ischemic heart disease and prostate cancer, are getting more common even in younger generation because of the westernized preference of diets to traditional ones. Heading towards us is the ‘tsunami’ of increased number patients with prostate cancer. Researchers have explored a number of possible dietary factors contributing to prostate cancer risk. The life-style that reduces or dissipates daily oxidative stress can prevent malignancies including prostate cancer. We urologists should provide literacy to prevent life-style diseases for men. Urologists concern men. As a men’s guard, we urologist will spread the idea and knowledge of Men’s Health throughout the world.

Research frontier of lower urinary tract function

Department of Urology, Asahikawa Medical University, Asahikawa, Japan
Hidehiro Kakizaki

As the percentage of senior citizens in the society increases, lower urinary tract symptoms (LUTS) are becoming more prevalent and have an enormous impact on their quality of life. Benign prostatic hyperplasia (BPH) and overactive bladder (OAB) are the most prevalent disorders causing LUTS in aging population. About 60% of patients with BPH are associated with OAB. Medical management of LUTS due to BPH with α-blocker and/or 5α-reductase inhibitor is the first line treatment, while in patients with OAB anticholinergic medication with or without α-blocker is often the first line treatment. Although these drugs are overall effective, there still remain refractory cases that require special considerations for management. Neurogenic bladder and interstitial cystitis are other difficult disorders to manage. To obtain deep insight into the pathophysiology of lower urinary tract dysfunction and to salvage patients with refractory LUTS, clinical as well as basic researches are definitely required.

Recent hot issues in the research field of lower urinary tract function include 1) urothelial function and its interaction with submucosal nerve endings and interstitial cells (myofibroblasts) to modulate bladder afferent activity, 2) electrophysiological properties of bladder afferent nerves, 3) urine storage center in the brain, 4) metabolic and vascular factors for the etiology of OAB, 5) urinary markers for OAB, and 6) β3-adrenoreceptor agonist as a new class of drug for treating OAB. Because OAB affects both men and women as a highly prevalent disorder with various etiologies, OAB becomes an important target for basic research and many works have shown the pathogenesis of OAB from the aspect of urothelialgenic, neurogenic, myogenic and vasculogenic origin. These factors are mutually interactive and represent their complex relationship within the bladder wall.

In this presentation, I would like to overview research frontier of lower urinary tract function and present the most updated information regarding functional control of the lower urinary tract and clinical implications.