Overall, prostate cancer was diagnosed in 1153 (9.6%) men from the Rotterdam ERSPC and 3962 (3.0%) men from Northern Ireland. Screening was associated with a 53% reduction in metastatic disease at diagnosis (0.1% vs 0.6%; $P < .001$), and a 37% reduction in death from prostate cancer (0.29% vs 0.47%; $P = .008$), compared with the group from Northern Ireland. Thus, the authors estimated a number-needed-to-screen (NNS) of 555 and number-needed-to-treat (NNT) of 37 to prevent 1 prostate cancer death at 8.5 years. These results compare favorably to the NNS of 1410 and NNT of 48 at 9 years reported in the (ITT) analysis of the ERSPC,[1] and highlight the potential influence of contamination on NNS and NNT estimates.

A limitation of this observational study is the possibility of bias from underlying differences between the 2 populations. Nonetheless, as the authors point out, the large sample size and extreme disparity in overall screening behavior between the Rotterdam and Northern Ireland groups provided a unique avenue to examine the benefits of screening.

Overall, the combined results from these 2 studies suggest that both noncompliance and contamination likely diluted the benefits of PSA screening in the original ERSPC report. Future analyses are necessary to follow up on these important findings and to examine whether the mortality reduction with screening continues to increase over time. ■

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Urologic Chronic Pelvic Pain Syndromes

A New Approach to Understanding and Managing Chronic Prostatitis and Interstitial Cystitis

Reviewed by J. Curtis Nickel, MD, FRCSC

Queen's University, Kingston, Ontario, Canada

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Clinical Phenotyping in Chronic Prostatitis/Chronic Pelvic Pain Syndrome and Interstitial Cystitis: A Management Strategy for Urologic Chronic Pelvic Pain Syndromes

Shoskes DA, Nickel JC, Rackley RR, Pontari MA.

Prostate Cancer Prostatic Dis. 2009;12:177-183.

Clinical Phenotyping of Chronic Prostatitis/Chronic Pelvic Pain Patients and Correlation With Symptom Severity

Shoskes DA, Nickel JC, Dolinga R, Prots D.

Urology. 2009;73:538-543.

Clinical Phenotyping of Women With Interstitial Cystitis/Painful Bladder Syndrome (IC/PBS): A Key to Classification and Potentially Improved Management

Nickel JC, Shoskes D, Irvine-Bird K.

J Urol. 2009;182:155-160.

Evaluation of a Modification of the UPOINT Clinical Phenotype System for the Chronic Pelvic Pain Syndrome

Hedelin HH.

Scan J Urol Nephrol. 2009;43:373-376.

Urologists' management of the common urologic chronic pelvic pain syndromes of chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS) and interstitial cystitis/painful bladder syndrome (IC/PBS) is poor. Despite infusion of decades of massive National Institutes of Health (NIH) research funding, our understanding of the etiopathogenesis of these conditions remains unclear and our treatment strategies dismal. A way forward was generally agreed upon at a NIH Workshop, "The Multidisciplinary Approach to Defining the Urologic Chronic Pelvic Pain Syndromes (UCPPS)," held in Baltimore, MD, in December 2007. Researchers and clinicians in the field agreed that patients with UCPPS are not a homogeneous group of patients with perceived prostate, bladder, or pelvic pain, but rather a group of individual patients with widely different clinical phenotypes, perhaps based on different etiologies and pathogenic trajectories. The NIH/National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) initiated the Multidisciplinary Approach to Pelvic Pain (MAPP) research consortium program which was launched and funded to explore basic science (particularly

biomarker and etiological studies) and epidemiology to better understand the differences in this heterogeneous group of patients. It was hoped that findings from MAPP would eventually allow phenotyping of UCPPS patients that could potentially lead to individualized treatment strategies.

However, although the MAPP has been initiated and the whole urology community has great hopes in the endeavor, it will be years before any results are apparent and decades before such results will ever be translated into treatment plans for patients. Because something was needed, Shoskes, Nickel, and colleagues proposed a 6-domain (Urinary, Psychosocial, Organ-Specific, Infection, Neurologic/systemic, and Tenderness [UPOINT]) clinical phenotype–based classification system as a means to improve our understanding and management of CP/CPPS and IC/PBS (Shoskes and colleagues, 2009, *Prostate Cancer Prostatic Dis.*).

Two follow-up articles, published in 2009, then validated the clinical applicability of using UPOINT in CP/CPPS (Shoskes and colleagues, *Urology*) and IC/PBS (Nickel and colleagues, *J Urol.*). In CP/CPPS, 22% were characterized in only 1 phenotype domain whereas in IC/PBS, 13% were characterized as having only 2 domains (by definition, patients would have the U- and O-domain phenotype to be diagnosed with IC/PBS). There was a stepwise progression in number of phenotypes with increasing number identified with longer duration of disease and more severe symptoms. Interestingly, in both UCPPS conditions, the phenotypic domains outside the specific organ (bladder or prostate), which included P, N, and T, had the most impact on general symptoms and quality of life (QoL). Other centers interested in improving their understanding and care for this patient population have already begun evaluating UPOINT in their specific clinical situation (Hedelin, *Scan J Urol Nephrol.*). This independent study from outside North America showed consistent results in 50 men with CP/CPPS; percentage positive for each domain was 52% for urinary, 36% for psychosocial, 38% for organ-specific, 38% for infection, 36% for neurologic/systemic, and 32% for pelvic floor muscle tenderness. The number of positive UPOINT domains and the NIH-CPSI and its QoL section were closely correlated.

These articles illustrate that UCPPS patients do indeed have individual clinical phenotypes that can be identified in normal clinical practice. This UPOINT classification system can and will be modified as new information (eg, biomarkers) becomes available from MAPP and other studies, perhaps by subcategorizing some of the key clinical UPOINT domains or altering the domain descriptions altogether. But this concept will be nothing but an academic exercise unless it improves patient treatment outcomes. It is believed that the key to successful management of UCPPS will be to not treat all patients with the same intervention (that traditional approach may explain why many therapies that appear to help a significant number of patients in clinical practice fail to show efficacy in large, randomized, placebo-controlled studies), but rather tailor individual multimodal therapy plans targeted at the identified individual UPOINT phenotypes. The authors of the above-referenced articles have suggested a number of appropriate best evidence-based treatments for each UPOINT domain. Two real-life clinical practice studies (in IC/PBS and CP/CPPS) are currently underway to determine if there is an observed clinical improvement in therapeutic results.

This group of related articles points us in a new direction in our understanding of UCPPS and, we hope, toward a better management plan. Readers can expect to see many more publications over the next decade as our understanding increases with regard to the clinical phenotypes in UCPPS. UPOINT is a new classification system for CP/CPPS and IC/PBS that is both flexible and responsive to new discoveries, in addition to allowing for individualization of specific treatments for each of these unique patients diagnosed with this difficult urologic condition. ■