

**LBA3**

**CLINICAL PHENOTYPING OF UROLOGIC CHRONIC PELVIC PAIN SYNDROMES (UCPPS): VALIDATION OF THE "SNOWFLAKE HYPOTHESIS"**

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**INTRODUCTION AND OBJECTIVE:** If there is only one thing learned from a decade of urological literature littered with well intentioned clinical trials, it is that while they initially appear similar, each Chronic Prostatitis (CP) and Interstitial Cystitis (IC) patient is an unique individual ("the Snowflake Hypothesis"). We have devised a clinical phenotyping strategy, categorizing patients into 6 "UPOINT" domains.

**METHODS:** CP and IC patients were clinically categorized into one or more of the UPOINT domains: Urinary (voiding symptoms), Psychosocial (identifiable psychopathology), Organ Specific (prostate/bladder centric), Infection (history of bacteriuria/prostate localization), Neurologic/Systemic (associated conditions eg. IBS, Fibromyalgia etc), Tenderness (of pelvic muscles). Demographics, including duration of symptoms/diagnosis, were documented. Standardized clinical assessment for CP and IC respectively was performed. Symptoms were assessed using disease specific and quality of life instruments (CPSI for CP, ICSI/PUF for IC, SF-12 for QoL). Clinically relevant associations were calculated.

**RESULTS:** Ninety CP and 100 IC patients were categorized into one or more of the UPOINT domains. Percent of CP and IC patients positive for each domain (CP:IC) was Urinary 52:100, Psychosocial 34:34, Organ Specific 61:96, Infection 16:38, Neurologic/Systemic 37:45 and Tenderness 53:48. There was a significant stepwise increase in total symptom severity scores as number of positive domains increase. Symptom duration but not age was associated with more positive domains. Significantly increased symptoms were seen in patients positive for the Neurologic/Systemic and Tenderness domains, while these domains along with the Psychosocial domain most strongly impacted quality of life.

**CONCLUSIONS:** Categorization of IC and CP patients employing the UPOINT phenotype classification system clearly identifies multiple clinical phenotypes (validating the Snowflake Hypothesis for UCPPS). Domains which function outside of the bladder/prostate (Psychosocial, Neurologic/Systemic, Tenderness) predict significant impact on symptoms and quality of life. Planned deep phenotyping studies and biomarker development will further expand these domains. The UPOINT system explains our consistent failure in developing a standardized therapeutic algorithm and will have clinical utility in formulating phenotypically individualized dynamic treatment strategies. This is the future of UCPPS management.

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