UNDERSTANDING SELF-REGULATORY PROCESSES IN ABDOMINOPELVIC PAIN: WE HAVE THE ANSWERS?

Chair: Dean Tripp
Session Length: 90 minutes
Speakers: Dean Tripp, PhD, Queen’s University; Adrijana Krsmnikovic, MSc, Queen’s University; Abi Muere, BSc, Queen’s University

SYMPOSIUM OBJECTIVE:
The overall aim is to expand upon the current literature on abdominopelvic pain, with a particular focus on Inflammatory Bowel Disease (IBD), Chronic Prostatitis/Chronic Pelvic Pain Syndrome (CP/CPPS), and Interstitial Cystitis/Bladder Pain Syndrome (IC/BPS). The cutting edge research has lagged behind on in-depth discussions of self-regulatory processes and the impact of psychosocial factors on pain and patient outcome. This symposium will discuss how self-regulatory processes function in these abdominopelvic pain conditions. The discussions and the models that may be applied to the treatment of poor patient outcomes will engage researchers and clinicians alike.

Speaker 1 Title: Mechanisms in the Relationship between Catastrophizing and Pain in Inflammatory Bowel Disease (IBD)

Speaker 2 Title: Catastrophizing and Behavioural Coping as Predictors of Physical and Mental Quality of Life in Chronic Prostatitis / Chronic Pelvic Pain Syndrome (CP/CPPS)

Speaker 3 Title: Psychosocial Mediators and Moderators of the Catastrophizing-Affective Pain Relationship in Interstitial Cystitis/Bladder Pain Syndrome (IC/BPS)

Learning Objectives:
1. To develop awareness of the abdominopelvic pain literature on pain, appraisals, and coping.
2. To consider the relationships between pain and psychosocial variables in abdominopelvic pain conditions.
3. To be able to discuss variables of interest in patient outcomes and clinical targets for interventions and pain management.

REFERENCES:
n/a
Mechanisms in the Relationship between Catastrophizing and Pain in Inflammatory Bowel Disease (IBD)

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AIM: Inflammatory Bowel Disease (IBD), made up of Crohn’s Disease and Ulcerative Colitis (UC), is a painful chronic gastrointestinal disease characterized by inflammation. Similar to other visceral chronic pain conditions, catastrophizing is associated with pain among IBD patients. Using a moderated mediation model, the present study examined the mechanisms through which catastrophizing predicts pain reports.

METHODS: 278 patients diagnosed with IBD were recruited from tertiary care urology clinics and completed questionnaires (demographics, McGill Pain Questionnaire, Pain Catastrophizing Scale, Brief Chronic Pain Coping Inventory, Patient Health Questionnaire). A moderated mediation model was investigated to test if illness-focused behavioural coping and wellness-focused behavioural coping each mediated the relationship between catastrophizing and pain, and if depressive symptomology moderated their effects.

RESULTS: Catastrophizing had a direct effect on pain, β=0.16, SE=0.045, p<.001. Illness-focused behavioural coping (β=0.19, SE=0.040) and wellness-focused coping (β=0.017, SE=0.010) both mediated the catastrophizing-pain relationship. The mediating effect of illness-focused coping was significantly stronger for participants with greater depressive symptomology; index of moderated mediation was 0.057 (95% confidence interval: 0.025 to 0.097).
CONCLUSIONS: These results indicate that the relationship between catastrophizing and pain is partially mediated by illness-focused and wellness-focused behavioural coping strategies. Furthermore, the mediating effect of illness-focused coping strategies is significantly stronger for individuals with greater depressive symptomology. These findings suggest the management of IBD pain may be supplemented through targeting specific psychosocial factors (appraisals & coping).

Catastrophizing and Behavioural Coping as Predictors of Physical and Mental Quality of Life in Chronic Prostatitis / Chronic Pelvic Pain Syndrome (CP/CPPS)

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AIM: Chronic Prostatitis/Chronic Pelvic Pain Syndrome (CP/CPPS) is a prevalent, refractory condition characterized by pain in the pelvic area and urinary frequency, largely unresponsive to medical interventions. The present study aimed to examine how catastrophizing and behavioural coping predict physical and mental Quality of Life (QoL) in this population.

METHODS: 175 patients from tertiary care clinics completed questionnaires. Demographics included age, ethnicity, education and employment status. Pain and symptoms were measured using the McGill Pain Questionnaire (SF-MPQ) and the Chronic Prostatitis Symptom Index (NIH-CPSI). Physical and mental QoL was measured using the Medical Outcomes Short Form 12-Item Health Survey (SF-12); Chronic Pain Coping Inventory (CPCI) measured use of behavioural coping strategies and Pain Catastrophizing Scale (PCS) measured catastrophic thinking. Hierarchical
regression modelling was conducted to examine the unique effects of appraisals and coping on patient QoL outcomes.

RESULTS: Psychosocial variables accounted for a significant amount of variance over and above demographic and medical variables for both physical ($\Delta R^2 = .25, p < .01$) and mental ($\Delta R^2 = .15, p < .01$) QoL. Guarding, resting, seeking social support and rumination were significant predictors of physical QoL, while resting and helpless catastrophizing were significant predictors of mental QoL.

CONCLUSIONS: Catastrophic appraisals (rumination, helplessness) and behavioural coping strategies (guarding, resting and seeking social support) are predictive of poorer mental and physical QoL in men with CP/CPPS. The results indicate that these are variables of interest in patient outcomes, and they may be important targets for interventions aimed to improve patient QoL.

Psychosocial Mediators and Moderators of the Catastrophizing-Affective Pain Relationship in Interstitial Cystitis/Bladder Pain Syndrome (IC/BPS)

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AIM: Interstitial Cystitis/Bladder Pain Syndrome (IC/BPS) is a chronic pelvic pain syndrome characterized by cycling pain localized to the bladder and urologic symptoms of urgency, frequency, and dysuria (Nickel et al., 2009). There is an established relationship between catastrophizing and pain among IC/BPS patients (Tripp, Nickel, et al., 2006; Tripp et al., 2012). The present study aimed to identify the mechanisms through which catastrophizing predicts pain using a moderated mediation model.

METHODS: 341 women diagnosed with IC/BPS were recruited from tertiary care urology clinics and completed questionnaires (McGill Pain Questionnaire, Pain Catastrophizing Scale, Brief Chronic Pain Coping Inventory, Centre for Epidemiologic Studies Depression Scale). A moderated mediation model was examined to test if illness-focused behavioural coping strategies mediated the relationship between catastrophizing and affective pain, and if depression moderated this effect.
RESULTS: Catastrophizing had a direct effect on affective pain, $\beta=0.40$, $SE=0.054$, $p<.001$. Illness-focused behavioural coping was a significant mediator of the catastrophizing-affective pain relationship, $\beta=0.061$, $SE=0.019$. The mediating effect of illness-focused coping was significantly stronger for participants with greater depressive symptomology ($\beta=0.09$, $SE=0.031$) in comparison to participants with less depressive symptoms ($\beta=0.04$, $SE=0.016$); index of moderated mediation was 0.049 (95% confidence interval: 0.0004 to 0.11).

CONCLUSIONS: The relationship between catastrophizing and affective pain is partially mediated by illness-focused behavioural coping strategies. Importantly, this mediating effect is significantly stronger for individuals with greater depressive symptomology (i.e., moderated model). These findings have the potential to improve programs for the management of IC/BPS pain through targeting specific psychosocial factors associated with pain.