



Have you ever had a flare of your symptoms? Clinically important findings from under-explored FLARES in Chronic Pelvic Pain



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Introduction

Chronic Pelvic Pain (CPP) affects up to 26.6% of women worldwide. Endometriosis and Bladder Pain Syndrome are two conditions in which there is a high prevalence of CPP. Translational Research in Pelvic Pain (TRIPP) is a research study with collaboration across sites in the UK, Europe and USA focussing on these conditions. Flares in symptoms are often described by patients but until recently have not been investigated in clinical research. The MAPP network [1,2] has explored flares in those with urological pelvic pain and found that ~95% report experience having flares, and these were most commonly painful and days-long.

This study aims to:

- Investigate the prevalence and experiences of flares in symptoms in women with CPP as well as their triggers

Methods

Using an expanded version of the previously published questionnaire, (including factors of specific relevance to endometriosis) we investigate flares in women with CPP. The questionnaire asks about flares of three different durations: short flares lasting less than an hour; medium flares lasting more than an hour but less than a day; and long flares lasting more than a day.

Aspects of flares assessed:

- duration
- frequency
- symptom changes
- how bothersome symptoms were
- healthcare utilization
- triggers

Recruitment and data collection occurred at three sites with trained researchers: University of Oxford, UK; Boston Children's Hospital, USA; and IBMC, Portugal. All participants were women aged 18-50 who were not currently pregnant or lactating.

We have 5 participant groups: endometriosis-associated pain (EAP); endometriosis-associated pain with comorbid bladder pain (EABP); bladder pain syndrome (BPS); pelvic pain without bladder pain or diagnosis of endometriosis (PP).

All participants gave informed consent. Ethics reference 19/YH/0030. Questionnaires were completed either on paper or online. RedCap was used for online data collection and export. All statistical analysis was carried out using SPSS version 27. Normality test carried out and appropriate non-parametric tests used for group comparisons (Kruskall-Wallis and Mann-Whitney U tests).

References

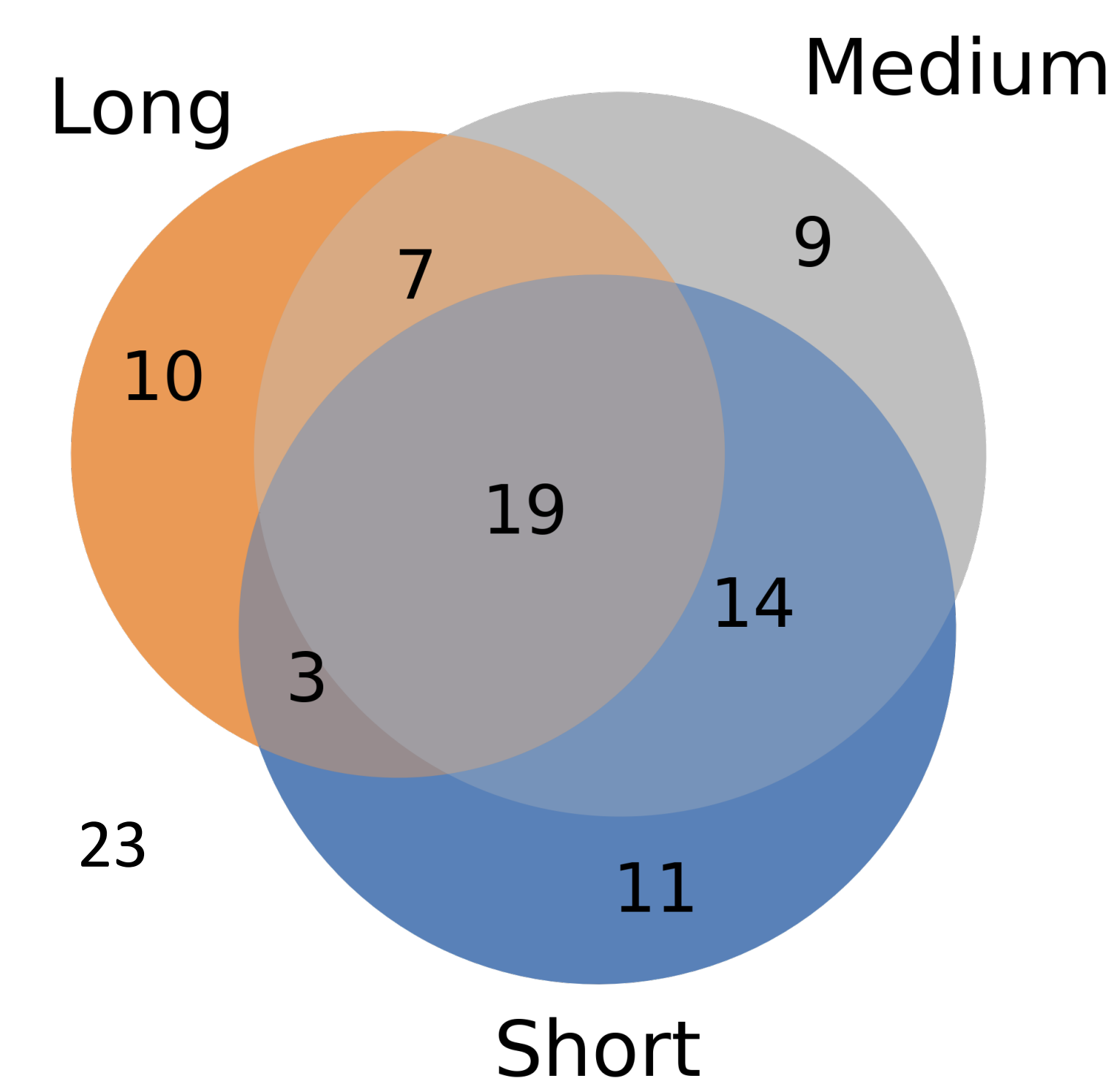
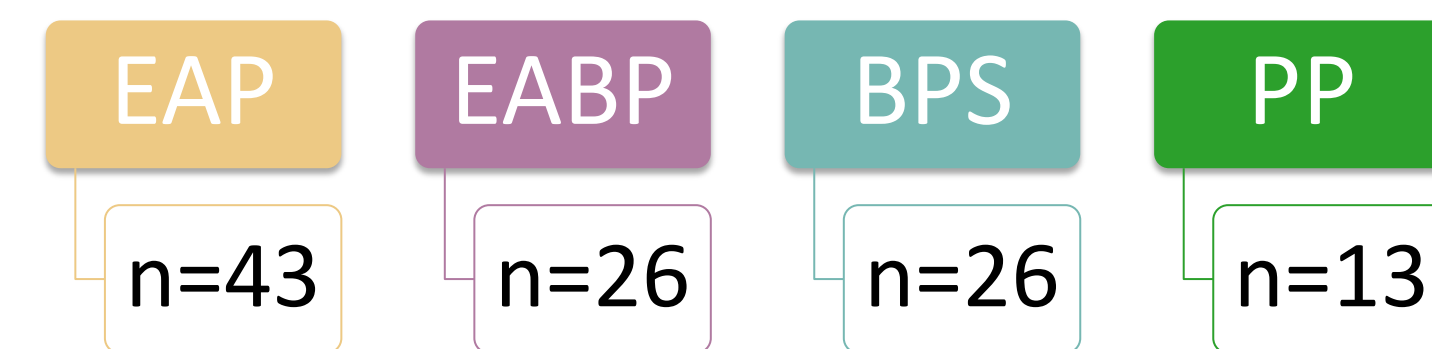
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Results



76% of the cohort report flares of at least one length.

How do symptoms change during flares?

- For all pain groups increased pain, pressure and discomfort associated with the pelvis and/or bladder was experienced during a flare (medians between 7 and 9 on 0-10 scale)
- For the BPS group they had significantly greater urgency and frequency of urination for all flares compared with EAP
- For EABP they experienced significantly greater urgency and frequency of urination and overall pain symptoms compared with EAP for short flares

How prevalent and long are these flares?

	Short flares				Medium flares				Long flares			
	EAP n=41	EABP n=21	BPS n=25	PP n=13	EAP n=41	EABP n=21	BPS n=25	PP n=12	EAP n=40	EABP n=21	BPS n=24	PP n=11
Count, %	25, 61%	13, 62%	9, 36%	1, 8%	23, 56%	19, 90%	7, 28%	3, 25%	17, 43%	13, 62%	8, 33%	1, 9%
Duration (median (IQR))	20 mins (20)	25 mins (29)	20 mins (20)	-	4 hours (2.8)	4 hours (2)	3 hours (16)	2 hours	3 days (3.3)	3 days (2)	7 days (64)	-

What triggers these flares?

	No triggers	1-2 triggers	3-5 triggers	6+ triggers
Short (n=33)	12.1%	30.4%	33.3%	24.2%
Medium (n=40)	62.5%	35%	2.5%	0%
Long (n=21)	14.3%	38.1%	33.3%	14.4%

68.5% report identifying triggers for their flares. Common triggers across the groups include stress, menstrual cycle & sexual activity.

During a typical flare which of the following do you usually do?

n, %	Short flares				Medium flares				Long flares			
	EAP n=25	EABP n=13	BPS n=9	PP n=1	EAP n=23	EABP n=19	BPS n=7	PP n=3	EAP n=17	EABP n=13	BPS n=8	PP n=1
Contact HCP	2, 8%	1, 7.7%	1, 11%	0	7, 30%	1, 5%	0	0	6, 33%	2, 15%	5, 63%	0
Medication change	2, 8%	3, 23%	0	1, 100%	3, 13%	3, 16%	2, 29%	1, 33%	6, 35%	2, 15%	4, 50%	0
Rest	21, 84%	11, 85%	5, 56%	1, 100%	21, 91%	18, 95%	3, 43%	3, 100%	15, 88%	11, 85%	5, 63%	0
Other	6, 24%	4, 31%	3, 33%	0	5, 22%	5, 26%	4, 57%	0	6, 35%	2, 15%	1, 13%	1, 100%

Other includes: 'ride it out', 'heating pad/hot water bottle', 'ice pack', 'meditation', 'medical cannabis', 'breath work', 'orgasm', 'bath', 'sleep' and rescue 'medication' such as tramadol.

What impact do these flares have?

Across all groups and all durations of flares:

- >60% participants reported that flares kept them from doing things they would usually do "some" or "a lot"
- >80% reported that they thought about their symptoms "some" or "a lot"
- >80% reported that these symptoms bothered them "some" or "a lot"

During a typical flare, what is your single most bothersome symptom?

- Pain, pressure or discomfort in the pelvis was the most bothersome symptom for all groups for all flares (>76% of participants in each group for short flares; >66% of participants in each group for medium flares; >79% of participants in each group for long flares)

Conclusions

- A large majority (76%) of participants with CPP experience flares in their symptoms.
- These flares are associated with pain and non-pain symptoms in all groups, with EABP and BPS groups experiencing greater bladder symptoms during flares.
- The majority of participants identified triggers for their flares.
- Given that >80% of participants found their flares to be bothersome there is clear need to explore these in future research both in terms of mechanisms and treatment.
- Discussion of flares needs to be included in clinical consultations with an aim to identify strategies to prevent or treat these.

Relevance for patient care

Discussion of flares is not currently part of clinical consultations with patients. This work suggests this could be a valuable addition particularly in helping patients understand their pain and aid them in identifying triggers. In future we hope that work will identify treatments targeting these flares. We also believe the characteristics of these flares may be useful in stratification of patients as these may relate to different pathologies and/or pain mechanisms.

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