

Do features of central sensitisation exist in greater trochanteric pain syndrome (GTPS)?

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Do features of central sensitisation exist in Greater Trochanteric Pain Syndrome (GTPS)? A case control study.

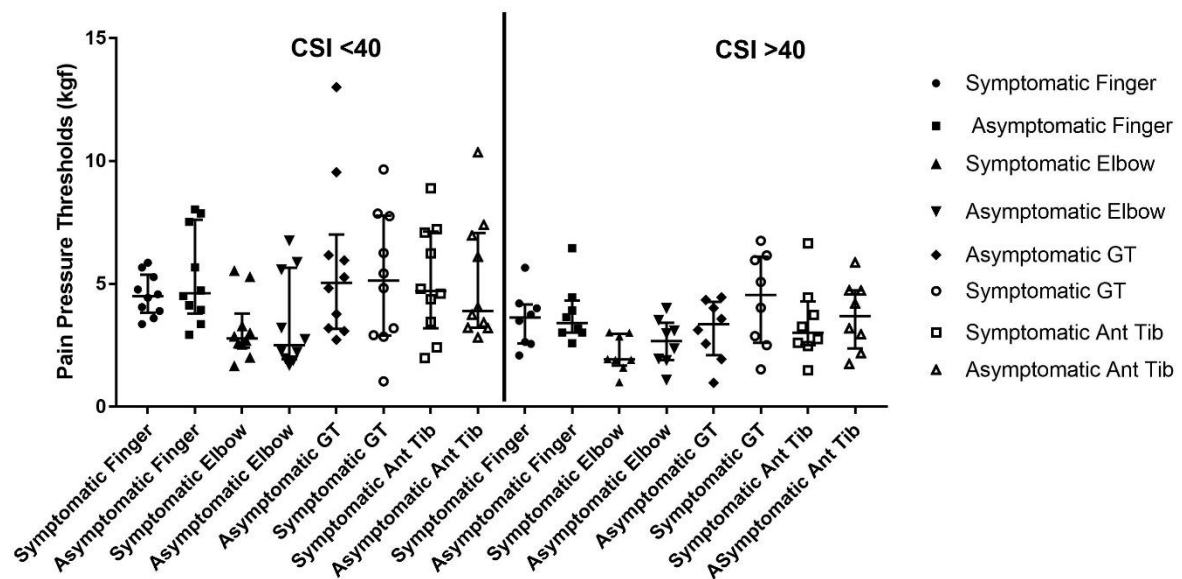


Fig. 1. Pressure Pain Detection Threshold (PPDT) values for GTPS group (n=18) dichotomised by CSI cut-off score.

Table 1: Characteristics of Study Participants (n=36)

	GTPS (n=18)	Controls (n=18)	Diffs between GTPS and Control (n=36)
	Median (IRQ)	Median (IRQ)	P-Value
Age (years)	54.5 (23)	46.5 (19)	0.29
BMI (kg/m ²)	27.01 (6.6)	23.67 (7.6)	0.01
Number of Co-Morbidities	1.00 (2)	0	NA
Symptom Duration (months)	9.5 (12)	NA	NA
Pain Severity (0-10)	5 (4)	NA	NA
VISA-G (0-100)	56.5 (26)	0	NA
CSI (0-100)	39 (20)	14 (12)	<0.001*
	Number (Percentage)	Number (Percentage)	
Gender, female, n (%)	15 (83%)	15 (83%)	
Side Affected (%)	Left =8 (44.4%) Right =10 (55.6%)	NA	NA
Positive CSI (CSI >40/100)	8 (44.4%)	0 (0%)	0.001*
Positive External Derotation Test	17 (94.4%)	0 (0%)	NA
Positive FABER test	18 (100%)	0 (0%)	NA

Table 2: Pain Pressure Thresholds of GTPS and control groups (n=36)

	GTPS (n=18)	Controls (n=18)	Differences between GTPS and Controls (n=36) p-value*	Difference based on CSI cut-off (GTPS group only (n=18) p-value
	Median (IRQ)	Median (IRQ)		
PPT Index Finger Symptomatic Side	4.04 (1.43)	6.45 (3.39)	0.01	0.06
PPT Index Finger Asymptomatic Side	4.04 (2.74)	6.24 (3.73)	0.01	0.06
PPT Lateral Elbow Symptomatic Side	2.65 (1.10)	4.28 (2.23)	<0.001	0.10
PPT Lateral Elbow Asymptomatic Side	2.56 (1.71)	4.15 (3.17)	<0.001*	0.70
PPT Greater Trochanter Symptomatic Side	3.90 (2.45)	7.10 (3.53)	<0.001*	0.04
PPT Greater Trochanter Asymptomatic Side	4.96 (3.77)	7.15 (3.77)	<0.001*	0.52
PPT Tibialis Anterior Symptomatic Side	4.06 (3.77)	6.99 (4.19)	0.003*	0.12
PPT Tibialis Anterior Asymptomatic Side	3.90 (2.81)	7.10 (3.45)	<0.001*	0.24

IQR; Interquartile Range; PPT; Pain Pressure Thresholds

*Significant at p<0.0035

Table 3 Pressure Pain Detection Thresholds of GTPS group by CSI cut-off score (n=18)

Pressure Pain Detection Thresholds (kgf)	CSI≤40 (n=10) Median (IRQ)	CSI > 40 (n=8) Median (IRQ)	Difference based on CSI cut-off in GTPS group p-value*
PPDT Index Finger Symptomatic Side	4.51 (1.55)	3.63 (1.58)	0.06
PPDT Index Finger Asymptomatic Side	4.62 (3.82)	3.42 (1.31)	0.06
PPDT Lateral Elbow Symptomatic Side	2.79 (1.39)	1.93 (1.29)	0.10
PPDT Lateral Elbow Asymptomatic Side	2.51 (3.72)	2.68 (1.52)	0.70
PPDT Greater Trochanter Symptomatic Side	5.05 (3.84)	3.36 (2.17)	0.04
PPDT Greater Trochanter Asymptomatic Side	5.14 (4.88)	4.56 (3.51)	0.52
PPDT Tibialis Anterior Symptomatic Side	4.71 (3.93)	3.01 (1.78)	0.12
PPDT Tibialis Anterior Asymptomatic Side	3.90 (3.86)	3.70 (2.37)	0.24

CSI, Central Sensitisation Inventory; IRQ; Interquartile Range; PPDT; Pressure Pain Detection Thresholds.

*Significant at $p < 0.0035$.

Table 4: Correlation between Pressure Pain Thresholds and Central Sensitisation Inventory Scores (n=36)

Side	Location	Correlation Co-efficient	P -value
Symptomatic Side	Index Finger	-0.55	0.027
	Lateral Elbow	-0.57	0.02*
	Greater Trochanter	-0.52	0.026*
	Tibials Anterior	-0.52	0.026*
Asymptomatic Side	Index Finger	-0.54	0.013*
	Lateral Elbow	-0.36	0.15
	Greater Trochanter	-0.27	0.277
	Tibialis Anterior	-0.44	0.007*

*significant at $p < 0.05$

CSI, Central Sensitisation Inventory; PPT, Pain Pressure Thresholds