Psychological factors, especially high pain catastrophising, are predictive of CPSP. Cognitive Behavioural Therapy (CBT) can reduce anxiety and depression and help emotional self-regulation. We tested the hypothesis that perioperative CBT is more effective than a Pain Education and Mindfulness (PEM) programme at reducing CPSP intensity at 3-months after breast cancer surgery in high pain-catastrophising patients.

Methods Women having primary breast cancer surgery were screened for pain-catastrophising characteristics using the Pain Catastrophising Scale (PCS). Patients scoring >24 received 4 one-hour sessions with the same psychologist, randomised 1:1 to receive either CBT or PEM. The primary outcome was Brief Pain Inventory (BPI) average pain severity measured at 3-months. Secondary outcomes included BPI composite pain-interference scores, PCS scores, and Hospital Anxiety and Depression Scale Score (HADS).

Results Among CBT patients, BPI average pain intensity (95% CI) significantly decreased from baseline 2.5(1.4-3.6) to 1.3 (0.4-2.3) at 3months (P=0.035), but not in PEM group who measures 2.9(1.8-4.0) at baseline, decreasing to 2.5(1.5-3.4) at 3-months (P=0.375). However, there was no statistically significant between-group difference at 3-months. Similarly, there were significant within-group improvements in pain-interference, catastrophising and mood scores across both study arms after 3-months, but no between-group differences were found at 3-months.

Abstract OP017 Table 1 Efficacy analysis for primary and key secondary outcomes

Outcome Measure (Scoring range)			Baseline	1 month Follow up	p-value*	3 month Follow up	p-value*
BPI Average Pain Severity (0-10)	PEM	Mean (95%CI)	2.94 (1.84-4.03)	3.51 (2.58-4.45)		2.46 (1.51-3.40)	
		Δ (95% CI)		-0.58 (-1.75-0.59)	0.324	0.48 (-0.60-1.56)	0.375
	CBT	Mean (95%CI)	2.52 (1.43-3.62)	2.45 (1.50-3.40)		1.34 (0.38-2.30)	
		Δ (95% CI)		0.07 (-1.11-1.25)	0.904	1.18 (0.09-2.27)	*0.035*
	Group Difference (95% CI)			-0.65 (-2.31-1.01)	0.435	-0.70 (-2.24-0.83)	0.361
BPI Composite Interference† (0-10)	PEM	Mean (95%CI)	2.58 (1.36-3.8)	2.03 (1.12-2.95)		1.39 (0.69-2.10)	
		Δ (95% CI)		0.54 (-0.57-1.66)	0.328	1.19 (0.02-2.35)	*0.047*
	CBT	Mean (95%CI)	2.30 (1.11-3.49)	1.65 (0.75-2.54)		0.61 (-0.10-1.31)	
		Δ (95% CI)		0.66 (-0.43-1.75)	0.230	1.69 (0.54-2.84)	*0.005*
	Group Difference (95% CI)			-0.11 (-1.66-1.44)	0.885	-0.51 (-2.15-1.13)	0.534
PCS Total (0-52)	PEM	Mean (95%CI)	30.25 (27.33-33.17)	18.62 (13.97-23.27)		11.99 (7.90-16.07)	
		Δ (95% CI)		11.63 (6.41-16.85)	<0.001	18.26 (13.37-23.16)	<0.001
	CBT	Mean (95%CI)	28.71 (25.79-32.63)	12.76 (8.01-17.52)		9.70 (5.52-13.87)	
		Δ (95% CI)		15.94 (10.63-21.25)	<0.001	19.01 (14.04-23.98)	*<0.001*
	Group Difference (95% CI)			-4.31 (-11.76-3.13)	0.249	-0.75 (-7.72-6.23)	0.830
HADS Anxiety Subscale⌘ (0-21)	PEM	Mean (95%CI)	10.57 (8.52-12.62)	7.22 (5.40-9.03)		6.09 (4.44-7.74)	
		Δ (95% CI)		3.35 (1.85-4.84)	*<0.001*	4.48 (2.65-6.31)	*<0.001*
	CBT	Mean (95%CI)	9.52 (7.47-11.57)	6.53 (4.69-8.36)		5.35 (3.67-7.03)	
		Δ (95% CI)		3.00 (1.48-4.52)	*<0.001*	4.17 (2.32-6.03)	*<0.001*
	Group Difference (95% CI)			0.35 (-1.78-2.48)	0.742	0.30 (-2.30-2.91)	0.815
HADS Depression Subscale⌘ (0-21)	PEM	Mean (95%CI)	5.96 (3.52-8.39)	3.74 (2.02-5.46)		2.96 (1.45-4.47)	
		Δ (95% CI)		2.22 (0.70-3.73)	*0.006*	3.0 (1.13-4.87)	*0.003*
	CBT	Mean (95%CI)	6.83 (4.39-9.26)	5.15 (3.41-6.88)		4.30 (2.78-5.83)	
		Δ (95% CI)		1.68 (-0.15-3.21)	*0.032*	2.52 (0.64-4.41)	*0.011*
	Group Difference (95% CI)			0.54 (-1.62-2.69)	0.613	0.48 (-2.18-3.14)	0.716

Δ change from baseline.
*From linear mixed model test for timepoint x group interaction term. All models included an unstructured correlation between time points.
† Scores on the BPI Interference subscale range from 0 to 10, with higher scores indicating worse pain interference
‡ Scores on the BPI Composite Severity subscale range from 0 to 10, with higher scores indicating greater severity of pain
⌘ Score of 8 or denotes considerable symptoms of anxiety or depression
Abbreviations: BPI, Brief Pain Inventory; CBT, Cognitive Behavioural Therapy; CI, Confidence Interval; HADS, Hospital Anxiety and Depression Scale; PCS, Pain Catastrophising Scale.

Conclusions Four one-to-one, perioperative CBT or PEM sessions to patients with high pain catastrophising characteristics, achieved comparable reductions in pain-intensity at 3-months after breast cancer surgery. Perioperative psychology might help to reduce the incidence of CPSP in breast cancer surgery.

OP018 OUR CATHETER EXPERIENCE IN EARTHQUAKE VICTIMS OPERATED IN OUR HOSPITAL AFTER THE 6 FEBRUARY 2023 EARTHQUAKE IN TURKEY

[1]Ergun Mendes*, [1]Ozal Adiyeke, [1]Onur Sarban, [1]Funda Gumus Ozcan, [2]Gozen Oksuz.
[1]Istanbul Basaksehir Cam and Sakura City Hospital, Istanbul, Turkey; [2]Kahramanmaras Sutcu Imam Univercity, Kahramanmaraş, Turkey

10.1136/rapm-2023-ESRA.18

Please confirm that an ethics committee approval has been applied for or granted: Yes: I'm uploading the Ethics Committee Approval as a PDF file with this abstract submission

Application for ESRA Abstract Prizes: I apply as an Anesthesiologist (Aged 35 years old or less)

Background and Aims After the earthquakes in Turkey, many citizens were injured and a long process that required physiological and psychological treatments started in the ongoing process. In this study, it was aimed to observe pain and psychological changes in earthquake victims in the light of the QoR-15 score.

Methods After the approval of the Local Ethics Committee (Decision No: 2023-194), earthquake victims who were operated on for traumatological and reconstructive reasons and inserted a catheter were evaluated retrospectively. Demographic data and catheters were recorded. Baseline, 24-hour and 72-hour QoR-15 and VAS scores were compared within themselves in terms of temporal changes.

Results A total of 40 catheters were inserted in 29 patients. (after exclusion 36 catheters-26 (15w/11m) patients evaluated). The type and number of catheters are shown in table 1. The age of the patients was 35.57 ± 13.69 years and the duration of catheterization was 8.91 ± 5.08 days. Infusion of 0.1% bupivacaine 0.5-1 mg/kg/24 hours was started routinely. The QoR-15 and VAS scores of the patients at baseline, 24 hours, and 72 hours were 80.45 ± 17.76, 95.27 ± 15.16 and 101.06 ± 15.52, and VAS scores were 4.61 ± 1.41, 1.79 ± 1.36 and 0.76 ± 0.86, respectively (p<001 and p<0.001, respectively) (table 2 and figures 1-2).

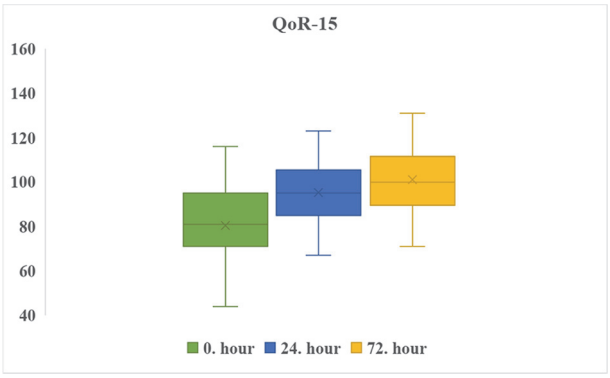
Abstract OP018 Table 1 The type and number of catheters

Catheter type	Catheter number	Included	Excluded
SiFICB	16	Case 7-10-11-13-14-16-18(2x)-22-23-25-26-27-28-29	Case 9
Supraclavicular	8	Case 2-4-12-15-19-24	Case 6-21
Interscalene	3	Case1-4	Case 9
Popliteal	4	Case 3-5-7-8	
Adductor	1	Case 5	
Epidural	2	Case 13-14	
Popliteal + SiFICB	2	Case 20	
Supraclavicular + SiFICB	2	Case 17	
Bilateral SiFICB	2	Case 14	

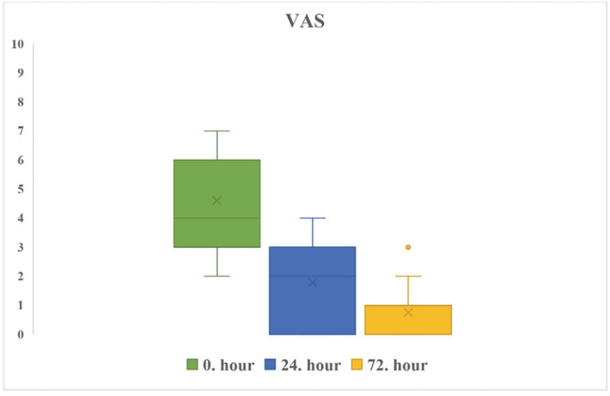
Abstract OP018 Table 2 QoR-15 and VAS scores (mean ± SD)

	0. hour	24. hour	72. hour	p
QoR-15	80.45 ±17.76	95.27 ± 15.16	101.06 ± 15.52	**0.001***
VAS	4.61 ± 1.41	1.79 ± 1.36	0.76 ± 0.86	**0.001***

**p = 0.000*
P < 0.05 was considered statistically significant



Abstract OP018 Figure 1 Change of QoR-15 (quality of healthing-15) scores over time



Abstract OP018 Figure 2 Change of VAS (visual analog scala) scores over time

Conclusions In this study, a significant improvement was achieved in QoR-15 and VAS scores as a result of catheter insertion. Considering that post-traumatic injuries require repetitive operations and pain worsens the existing psychological state, it can be stated that catheterization is beneficial.

Central nerve blocks – Free papers 1

OP019 A PILOT DOSE-FINDING STUDY TO COUNTER BLOOD PRESSURE REDUCTION DURING EPIDURAL ANALGESIA BY ADDING EPINEPHRINE TO THE EPIDURAL INFUSION

[1]Olga Nin*, [1]Andre P Boezaart, [1]Christopher Giordano, [2]Steven Hughes, [3]Hari Parvataneni, [4]Miguel Angel Reina, [1]Terrie Vasilopoulos. *[1]Anesthesiology, University of Florida, Gainesville, USA; [2]Department of Surgery, University of Florida, Gainesville, USA; [3]Orthopedic Surgery, University of Florida, Gainesville, USA; [4]Anesthesiology, CEU San Pablo School of Medicine, Madrid, Spain*

10.1136/rapm-2023-ESRA.19

Please confirm that an ethics committee approval has been applied for or granted: Yes: I'm uploading the Ethics Committee Approval as a PDF file with this abstract submission

Application for ESRA Abstract Prizes: I don't wish to apply for the ESRA Prizes

Background and Aims Epidural analgesia is widely used for perioperative pain management(1,2). An unwanted side effect is the reduction in blood pressure due to the sympathetic blockade. The aim of this study was to evaluate the hemodynamic effect(s) of adding different concentrations of epinephrine to the local anesthetic solution to potentially counteract the sympathectomy(3).

Methods This pilot study was conducted with approval from the Institutional Review Board of University of Florida and informed consent was obtained from all patients. Sixty-six patients were enrolled in a randomized controlled, quadruple-blinded pilot study into three groups (Epidural ropivacaine 0.2% (control), the same local anesthetic agent with either 2 mcg/mL or 5 mcg/mL epinephrine). The study's primary measurements included mean systolic, diastolic and arterial pressure, arterial blood oxygen saturation, heart rate, respiratory rate, and pain score.

Results A total of 47 patients completed the study (table 1). Fifteen patients were in the control group, 16 patients received 0.2% ropivacaine + 2 mcg/mL epinephrine, and 16 patients received 0.2% ropivacaine + 5 mcg/mL epinephrine. We found significant differences in SBP (p = 0.015) and HR (p = 0.036) for patients who received thoracic epidural blocks (n=26) (figure 1). The control group had much lower SBP compared to the +5mcg/mL epinephrine group; and the +2 mcg/mL epinephrine.

Abstract OP019 Table 1 Demographics and clinical characteristics of the patient sample, stratified by group

	Control (n=15)	Ropivacaine (0.2%) + 2 mcg/mL epinephrine (n=16)	Ropivacaine (0.2%) + 5 mcg/mL epinephrine (n=16)
Age, mean years	59.5 + 14.2	52.8 + 16.8	57.3 + 14.5
Gender, % women (n)	57.1% (8)	43.8% (7)	43.8% (7)
Type of surgery, % (n)			
Abdominal	60% (9)	43.7% (7)	75% (12)
Orthopedic	40% (6)	56.3% (9)	25% (4)
Type of block, % (n)			
Lumbar	40% (6)	56.3% (9)	25% (4)
Thoracic	60% (9)	43.7% (7)	75% (12)