

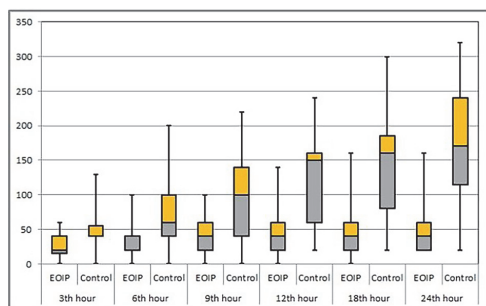
throughout all time intervals ($p > 0.05$). The EOIPB group demonstrated significantly higher average QoR-15 scores compared to the control group (128.2 ± 10.23 vs 112.83 ± 12.06 , respectively, $p < 0.001$) (table 1,2-figure 1).

Abstract EP125 Table 1 Patient demographics. Gender and ASA class are expressed as number of patients

	EOIPB (n:40)	Control (n:40)	p
Descriptive Data			
Age (years)	48.83±10.76	47.9±9.20	0.678
Gender F/M	27/13	24/16	0.485
ASA I/II	17/23	21/19	0.370
Length (cm)	168±9	168±8	0.999
Weight (kg)	77.23±12.37	76.75±9.20	0.844
BMI (kg/m ²)	27.21±3.61	27.29±2.87	0.912
Surgical time (min)	61.62±9.43	62.75±7.33	0.551

Abstract EP125 Table 2 Comparison of postoperative analgesia related data. Data is expressed as mean±standard deviation. Data related to NRS and analgesic requirements are expressed as median (percentiles 25–75). p values were italicized and p values that are written in bold represent statistical significance

	EOIPB (n:40)	Control (n:40)	p
NRS at different times			
1st h	3 (2-3)	2.5 (2-3)	0.735
3rd h	2 (2-3)	2 (2-3)	0.753
6th h	2 (1-2.25)	2 (1-2)	0.189
9th h	2 (1-2)	1.5 (1-2)	0.140
12th h	1 (1-2)	2 (1-2)	0.475
18th h	1 (1-1.25)	1 (1-2)	0.580
24th h	1 (1-1)	1 (1-1)	0.147
Cumulative Morphine consumption (mg)			
3rd h	30 (15-40)	40 (40-65)	<0.001
6th h	40 (20-40)	60 (40-100)	<0.001
9th h	40 (20-40)	100 (40-140)	<0.001
12th h	40 (20-40)	150 (60-160)	<0.001
18th h	40 (20-40)	160 (80-185)	<0.001
24th h	40 (20-40)	170 (115-240)	<0.001
First analgesic demand time (hours)	3.18±3.80	1.80±2.21	0.051
QoR 15 score	128.2±10.23	112.83±12.06	<0.001



Abstract EP125 Figure 1 Demonstration of cumulative tramadol consumptions (mg) by groups over time

Conclusions Bilateral ultrasound-guided EOIPB provides effective analgesia and reduces analgesic requirement in the first 24 hours for patients undergoing LC.

Ethical Committee Approval

EP126 COMPARATIVE STUDY ON SHEAR-WAVE ELASTOGRAPHY OF THE CORACOHUMERAL LIGAMENT BETWEEN ADHESIVE CAPSULITIS AND HEALTHY CONTROLS: SUGGESTION OF CUT-OFF VALUE

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Background and Aims Pathologic changes in coracohumeral ligament (CHL) on MR or US is suggestive of diagnosis of adhesive capsulitis (AC). Objective is to compare the elasticity measured at the CHL between the patients with AC and healthy controls using shear wave elastography (SWE), and to suggest cut-off value.

Methods This prospective study included 24 shoulders with clinical diagnosis of AC and 32 healthy shoulders. Longitudinal B-mode image and SWE of CHL were obtained in axial oblique plane on the lateral border of the coracoid process. In between-group comparison, thickness and elasticity of CHL in patient group obtained with maximal ER were compared with those of healthy group obtained with maximal ER and with 30° ER, respectively. Cut-off value and inter/intra-rater reliability were calculated by ROC analysis and ICC, respectively.

Abstract EP126 Table 1 Baseline demographics

Table 1. Baseline demographics			
	Normal subjects (n=32)	Adhesive capsulitis (n=24)	p-value
Age	60.3 (±5.3)	57.9 (±10.1)	0.248*
Male (%)	12 (37.5%)	13 (54.2%)	0.280†
Female (%)	20 (62.5%)	11 (45.8%)	
BMI	23.7 (±2.1)	23.7 (±2.4)	0.991*
NRS		4.5 (±1.6)	
SPADI (%)		43.7 (±19.2)	
Range of motion (°)			
Forward flexion	178.1° (±4.0)	125.0° (±31.1)	< 0.001*
Abduction	177.5° (±10.8)	86.3° (±48.8)	< 0.001*
External rotation	79.8° (±12.9)	32.7° (±18.5)	< 0.001*

Datas are presented as mean (±SD) or number (%). SPADI: shoulder pain and disability index.

P values for between group difference by *Student's t-test in continuous variables or by †χ² test in categorical variables.

Datas are presented as mean (±SD) or number (%), P values for between group difference by *Student's t-test in continuous variables or by †χ² test in categorical variables. BMI; body mass index, NRS; Numerical rating scale, SPADI; shoulder pain and disability index

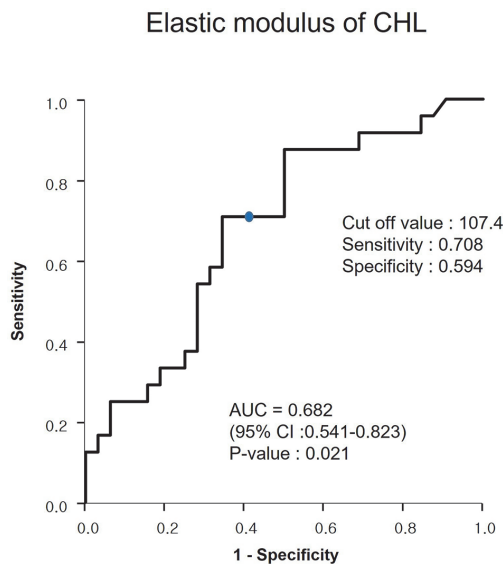
Abstract EP126 Table 2 Comparison of CHL elasticity and thickness between subjects with adhesive capsulitis and healthy group

Table 2. Comparison of CHL elasticity and thickness between subjects with adhesive capsulitis and normal populations			
	Young healthy (n=32)	Adhesive capsulitis (n=24)	p-value
SWE (kPa)			
CHL (Maximal ER)	141.1 (±56.2)	141.1 (±53.4)	0.997
CHL (30° ER: mean maximal ER value of AC)		105.3 (±50.2)	0.013**
Thickness (mm)			
CHL (Maximal ER)	0.11 (±0.03)	0.20 (±0.06)	<0.001*
CHL (30° ER: mean maximal ER value of AC)	0.09 (±0.01)		<0.001**

Datas are presented as mean (±SD). P-value for between group difference by Student's t-test.

SWE: Shear Wave Elastography, SD: Standard deviation, CHL: coracohumeral ligament, ER: external rotation, AC: adhesive capsulitis. †: compare CHL between adhesive capsulitis patients with maximal ER and normal population with 30° ER, which maintains similar angle of external rotation between two groups.

Datas are presented as mean (±SD). P-value for between group comparison by Student's t-test and within group comparison by paired t-test. SWE: Shear Wave Elastography, SD: standard deviation, CHL: coracohumeral ligament, ER: external rotation, AC: adhesive capsulitis. †: between AC patients with maximal ER and healthy group with 30° ER determined by mean ER of AC patients to maintain similar angle of external rotation between two groups. ‡: between CHL with 30° ER and maximal ER in healthy group



Abstract EP126 Figure 1 Validity of elastic modulus of CHL on shear wave elastography for differentiating adhesive capsulitis using ROC analyses. CHL; coracohumeral ligament, AUC ; area under the ROC curve, ROC ; receiver operating characteristic

Results Baseline characteristics were similar between two groups (table 1). Elasticity of CHL with maximal ER was similar between two groups. However, elasticity of CHL with maximal ER in patient group were significantly higher than those of CHL with 30° ER in healthy group (table 2). Cut-off value of CHL elasticity in 30° ER was 107.4 (figure 1). SWE showed good inter-rater reliability and intra-rater reliability for CHL elasticity (with 30° ER, ICC 0.662 and 0.514; with maximal ER, ICC 0.660 and 0.506).

Conclusions Shear wave elastography can show increased tissue elasticity of CHL in adhesive capsulitis of shoulder compared to healthy group with good intra- and inter-rater reliability. Also, the optimal cut-off value of CHL elasticity to predict adhesive capsulitis was presented.

ePoster session 4 – Station 4

EP127 DURATION OF ANALGESIA AFTER INTERSCALENE BRACHIAL PLEXUS BLOCK COMBINED WITH INTRAVENOUS DEXAMETHASONE AND DEXMETETOMIDINE: A RANDOMISED, CONTROLLED, TRIPLE-BLIND TRIAL

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Background and Aims Pain management of arthroscopic shoulder day-case surgery is a real challenge. Intravenous dexamethasone and dexmedetomidine are two adjuncts to local anaesthetics used independently to prolong analgesia after peripheral nerve block, when no perineural catheter is used.

Methods This randomised, controlled, triple-blinded trial tested the hypothesis that the intravenous combination of dexamethasone and dexmedetomidine would provide superior analgesia

than intravenous dexamethasone alone in patients undergoing arthroscopic rotator cuff repair with an interscalene brachial plexus block. After induction of general anaesthesia, 122 patients were randomised to receive intravenously either dexamethasone 0.15mg.kg⁻¹ (Dexa group) or a combination of dexamethasone 0.15mg.kg⁻¹ and dexmedetomidine 1µg.kg⁻¹ (Dexa-Dexme group). The primary outcome was the duration of analgesia measured from the time of block procedure to first oral morphine intake. Secondary outcomes included duration of sensory and motor blocks, pain scores at rest and on movement, cumulative oral morphine consumption at 48h and rates of hypotension.

Results The mean (standard deviation) duration of analgesia was 24.5h (2.0h) in the Dexa group and 22.4h (1.6h) in the Dexa-Dexme group (p=0.42). Similarly, there were no significant differences in all the secondary outcomes, with the exception of rates of hypotension that was higher in the Dexa-Dexme group (83.3% vs 43.5%, p<0.001)

Conclusions In conclusion, the intravenous combination of dexamethasone and dexmedetomidine does not provide superior analgesia than intravenous dexamethasone after an interscalene brachial plexus block. The administration of dexmedetomidine is associated with more episodes of hypotension.

EP129 COMPARISON OF CLINICAL EFFECTS AND PHYSICAL EXAMINATION OF TRANSFORAMINAL AND CAUDAL STEROID INJECTION WITH TARGETED CATHETER IN LUMBAR RADICULOPATHY

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Background and Aims Transforaminal and caudal epidural steroid injections are used to treat lumbar radiculopathy. The aim of this study was to investigate the clinical effects and physical examinations of transforaminal steroid injection compared to caudal through a targeted catheter in lumbar radiculopathy.

Methods Fifty patients with lumbar radiculopathy candidates for epidural steroid injection were divided into transforaminal (T) and caudal (C) groups. Steroid injection was performed in group T with transforaminal method, and in group C with caudal method using a targeted catheter for each involved spinal nerve root. Pain intensity (VAS), Oswestry Disability Index (ODI), daily analgesic consumption, and physical examinations on 4 follow-ups were evaluated.

Results Pain score (VAS) and functional disability index (ODI) were similar in both groups, and there was no significant difference between the two groups (p>0.05). The positive Lasègue test was significantly higher in the caudal group than in the transforaminal group only in the third month (p<0.05). Other physical examinations in both groups did not have significant differences in all the follow-ups. Also, there was no difference in the amount of analgesic consumption in the two groups. No complications were observed in both groups.

Conclusions This study showed that transforaminal and caudal steroid injection (with a targeted catheter) in patients with lumbar radiculopathy had similar effects in controlling pain and improving functional disability of patients in the short term. Cases of recurrence of positive Lasègue test in physical