

Results On acute pain perceptions, literature search highlights problems related to healthcare systems and misconceptions among healthcare workers, rendering pain alleviation, during emergencies and disaster, disregarded. On pain assessment, numerous studies emphasize the need for standardized self-reporting pain measurement tools, when it comes to evaluate a patient's pain intensity and severity. Various treatment modalities exist that can successfully guarantee pain alleviation in almost any setting. Lessons acquired from environmental and military disasters emphasize on the use of interventional techniques, like peripheral nerve blocks.

Abstract B56 Table 1 Studies of peripheral nerve blocks for analgesia in the ED

Author, Year	Type of study	Aim-finding
Espouzan et al, 2017	RCT	US-guided femoral blocks as an efficient method of pain management in the ED
Moskovits et al, 2015	Review	Regional blocks of the face for facial wounds
Lacroix et al, 2010	Prospective observational	Regional blocks of the face more efficient than local anesthetic infiltration for facial wounds in the ED
Chahbdrax et al, 2015	Retrospective observational	Increasing role of regional anesthesia for analgesia in patients with burns
Frenkel et al, 2015	Prospective observational	US-guided forearm blocks provide efficient pediatric analgesia in the ED
Stewart et al, 2007	RCT	ED continuous femoral block as pediatric analgesia for fracture femur better than standard block
Budac et al, 2006	Letter to the Editor	Intraorbital block as a pain relief option for facial trauma involving the upper lip and inframaxillary area
Ketelaars et al, 2018	Narrative review	TAP block as effective pain relief for pelvic fractures
Harda et al, 2018	Systematic review	Fascia Iliaca Compartment Block is a useful analgesic technique even in the prehospital environment with few adverse events
Levine et al, 2016	RAPID trial (ongoing)	Trial protocol for femoral and fascial iliaca blocks versus parenteral opioids in low resource settings
Aluisio et al, 2016	Cross-sectional	attainment of high knowledge and technical skill scores in both physicians and nurses after a brief training in regional anesthesia techniques
Lippert et al, 2013	Review	Ultrasound-guided nerve blocks performed by emergency physicians substantially affect pain control and safety for patients with traumatic injuries in disaster settings
Missair et al, 2012		Single shot femoral and sciatic nerve blocks as pain relief

Conclusions The problem of pain management extends far beyond a single country or a single ED. Physicians should recognize pain as a true emergency and treat it as such.

B57 POSTOPERATIVE PAIN MANAGEMENT AFTER TOTAL KNEE ARTHROPLASTY: LIA VS. FNB+DIB USING A ROPIVACAINE-DEXMEDETOMIDINE COMBINATION

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10.1136/rapm-2022-ESRA.132

Background and Aims Postoperative pain management after total knee arthroplasty (TKA) remains a major challenge.

Ultrasound-guided regional anesthesia (UGRA) using femoral nerve block (FNB) and distal ischiadicus block (DIB) is a standard procedure for primary TKA. Local infiltration analgesia (LIA) is an alternate approach that applies the concept of surgical wound infiltration with local anaesthetics, which gained widespread popularity because of ease of application, cost effectiveness and lack of apparent motor block.

The aim of our RCT was to evaluate LIA vs. UGRA concepts in TKA when dexmedetomidine is used as an adjuvant. Working hypothesis: periarticular LIA would have disadvantages over UGRA in terms of postoperative pain control.

Methods 50 Patients received LIA of the knee capsule during surgery with 60 ml ropivacaine 0.5% and 1 ml (100 mcg) dexmedetomidine or two single-shot USRA blocks (NFB and DIB) before surgery with 15 ml each of ropivacaine 0.5% and 0.5 ml each (50 mcg) dexmedetomidine. (Ethical Committee No. 32-239 ex 19/20, 16.12.2020).

Results The safety analysis showed significantly higher need for opioids in the LIA group with a median oral morphine equivalent of 42.0 [IQR 23.5 to 57.0] mg vs. 27.0 [IQR 0.0 to 33.6] mg (P=0.022).

Abstract B57 Table 1 Baseline characteristics

	LIA	NFB-DIB	P
Age (years)	68,6 10,2	67,6 11,0	0,771
Female	12 (48)	10 (40)	0,569
Height	167,1±9,4	171,0±12,1	0,438
Weight	77,0 [70,0 to 88,5]	85,0 [70,0 to 131,2]	0,457
BMI (kg/m ²)	28,4 [25,7 to 31,6]	27,8 [24,3 to 33,8]	0,734
ASA 1	0 (0)	1 (4)	
ASA 2	10 (40)	7 (28)	0,457
ASA 3	15 (60)	17 (68)	0,457
Main anesthetic technique			
General Anesthesia	5 (20)	11 (44)	0,037
Spinal anaesthesia	20 (80)	14 (56)	
Days of hospitalization	6,0 [6,0 to 7,0]	6,0 [6,0 to 7,0]	0,659

Abstract B57 Table 2 Opioid consumption

Opioid consumption	OR	95% CI
Spinal anaesthesia	1,014	0,316 to 3,728
LIA	2,511	0,768 to 8,205
Male sex	1,086	0,316 to 3,728
Pain		
Spinal anaesthesia	1,121	0,628 to 1,999
LIA	1,626	0,506 to 5,232
Male sex	0,782	0,234 to 2,613

Conclusions Our study demonstrated a superior opioid-sparing effect of UGRA compared with LIA when dexmedetomidine was added. We observed a longer-lasting opioid-sparing effect compared with recently published literature, which may be due to the addition of dexmedetomidine. Multimodal analgesia concepts could be improved when LIA or UGRA techniques are combined with dexmedetomidine.

B58 CONCEPTS OF ANALGESIA AND SEDATION FOR THE PRE-OPERATIVE PERIPHERAL REGIONAL ANESTHESIA

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10.1136/rapm-2022-ESRA.133