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
Forouzan et al, 2017	RCT	US-guided femoral blocks as an efficient method of pain management in the ED
Moskovits et al, 2013	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
Chaibdraa 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	Infraorbital block as an 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
Hards 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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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 [70,0 131,2]	0,437
BMI (kg/m2)	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)	0,437
ASA 3	15 (60)	17 (68)	0,437
Main anesthetic technique			
General Anaesthesia	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]	0,639

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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Background and Aims There is no evidence on analgesia or sedation concepts during pre-operative placement of peripheral nerve block. Aim of our RCT pilot trial was to estimate the best practice approach for analgosedation for regional anaesthesia.

Methods 50 patients participated the study from 08/2020–12/2020. Computer-based randomization was performed to one of five treatment concept groups:

1. Remifentanyl-Infusion (no bolus, 6–9 mcg/kg/h i.v.),
2. Fentanyl-Bolus (100 mcg i.v. for BW>50 kg and 50 mcg for BW< 50 kg),
3. Clonidine 150 mcg bolus i.v.,
4. Lidocaine/Prilocaine topical cream 30 min prior to the puncture,
5. Placebo.

Pain intensity at skin puncture with 22-G 50 mm and 21-G 100 mm needles was the main outcome, assessed by a numeric rain scale (NRS) at the time of a needle insertion, as well as patients' satisfaction and wellbeing (Anaesthesiological Questionnaire).

(Ethical Committee No. 31–255 ex18/19)

Results There were no statistical differences between the baseline charakteristics. No significant difference in favour of any analgosedation concept regarding pain reduction or wellbeing. Remifentanil infusion provided the lowest experienced pain levels (NRS 2,0 [1,5–3,0]) followed by Lidocaine/Prilocaine creme (NRS 2,5 [1,25–4,0]) and Placebo (NRS 2,5 [1,25–4,5]). No adverse effects (e.g. nonresponsiveness or drop in oxygen saturation or blood pressure, nerve injury) were revealed.

Abstract B58 Table 1

Outcome	Remifentanil	Lidocaine/ Prilocaine	Fentanyl	Clonidine	Placebo	P
Pain at puncture (NRS)	2.00 [1.5 to 3.0]	2.50 [1.25 to 4.0]	3.00 [2.0 to 4.75]	4.00 [3.0 to 5.0]	3.00 [2.0 to 4.5]	0,172
Light pain (1 to 2)	7/9	6/12	5/12	1/9	3/8	0,80
Medium or strong pain (3)	2/9	6/12	7/12	8/9	5/8	
Wellbeing (ANP)						
None	0/9	1/12	0/11	0/9	0/8	0,535
Some	1/9	3/12	3/11	0/9	1/8	
Quite	6/9	7/12	8/11	9/9	6/8	
Strong	2/9	1/12	0/11	0/9	1/8	
Complications	None	None	None	None	None	n.a.

Conclusions

Further issue to investigate are, whether it is reasonable to reduce the pain intensity at the price of patients' vigilance. Analgosedation with remifentanil seems to provide the lowest pain while best ensuring patients' wellbeing. Optimal approach has to be adjusted according to the patient needs, medical personnel expertise and a hospital's logistics.

B59 ANATOMICAL STUDY OF CATHETER MOBILIZATION AFTER PHYSIOTHERAPY IN CLASSICAL POSTERIOR SUPRASCAPULAR NERVE BLOCK

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Background and Aims Continuous peripheral nerve blocks (cPNB) are widely used and have potential benefits for providing pain relief for several days. Successful insertion of cPNBs and avoidance of their dislocation can represent a challenge.

Dislocation of cPNBs can result in failure of the block and is poorly described in the literature. The rate of catheter dislocation is probably underestimated.

We designed an cadaveric anatomical study to assess the rate of catheter displacement after a simulated program of intensive physiotherapy. The aim was to compare the location of the catheter tip just after placement and after physiotherapy.

Methods Eight ultrasound guided continuous suprascapular nerve blocks were performed. The catheter tip localization was confirmed by tomodensitometry. We then simulated a physiotherapy session by performing a series of standardized movements on anatomical specimen. After marking with methylene blue, an anatomical dissection followed to localize the position of the catheter tip.

Results There was radiological evidence of correct placement in the vicinity of the suprascapular notch for all catheters.

Dissections demonstrated that in six specimens (75%), catheters remained in the correct place after physiotherapy.

Two catheters came out and escaped through supraspinatus muscle and trapezius.

Conclusions From an anatomical point of view, catheter dislocation of continuous suprascapular nerve blocks after an intense program of physiotherapy of shoulder mobilization, occurs in 25% of cases.

B60 IPACK AND ACB VERSUS PERIARTICULAR INJECTION (PAI) ENHANCES POSTOPERATIVE PAIN CONTROL IN ANTERIOR CRUCIATE LIGAMENT (ACL) REPAIR: A RANDOMIZED CONTROLLED TRIAL

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Background and Aims Periarticular injections (PAIs) are becoming a component of multimodal joint pathways. Motor-sparing peripheral nerve blocks, such as the infiltration between the popliteal artery and capsule of the knee (IPACK) and the adductor canal block (ACB), may augment PAI in multimodal analgesic pathways for knee surgery, but supporting literature