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PAIN IN THE BALTICS 2024
October 11–12, 2024

PAIN IN THE BALTICS 2024

BOOK OF ABSTRACTS

PAIN IN THE BALTICS 2024

PAIN IN THE BALTICS 2024
October 11–12, 2024
Radisson Blu Daugava Hotel
Riga, Latvia

PAIN IN THE BALTICS 2024

PAIN IN THE BALTICS 2024

Tēmas/ Themes:

- Neuropathic pain session
- Headache session
- Invasive pain management session
- Neuromodulation session
- Rehabilitation and psychotherapy session
- Diffuse pain session
- Oncological pain / palliative care

Darba grupu tēmas / Workshop themes:

- Perioperative management of chronic pain
- Joints pain (knee, hip, shoulder, SI, facets)
- Mononeuropathies

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REFERENCES

1. AQUIPTA® (atogepant) IE Summary of Product Characteristics. August 2023. AbbVie Deutschland GmbH & Co. KG, Germany. Reg.Nr. EU/1/23/1750/001-004.

2. Morena-Ajona D, et al. J Clin Med. 2022;11(6):1656.

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1. Epidural Steroid Injections – Are They Still Relevant?

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Keywords
Epidural Steroid, Radicular Pain

Abstract

Introduction

First record of Epidural Steroid Injection (ESI) for management of lumbar radicular pain has been mentioned in 1952. Radicular pain cause intervertebral disc herniation and spinal stenosis. Radicular pain described as a sharp, radiating pain in associated dermatome. Analgesics effects of corticosteroids are related to the phospholipase A2 enzyme inhibition, inhibition of neural transmission in nociceptive C fibers and reduction of capillary permeability. The resources recommend use ESI up to four times per year, with a minimum duration of at least two weeks, but there is no definitive research to mandate the frequency of how often you should have these injections. The aim of our study is to investigate effectiveness of ESI and to find the optimal duration between injections.

Materials and Methods

Thirty-one radicular pain and spinal stenosis patients (14 males, 18 females) were enrolled in the study. All patients received a fluoroscopically guided interlaminar ESI or transforaminal ESI (Triamcinolone acetonide 40 mg and Lidocaine hydrochloride 20 mg). All patients were evaluated according to with the numerous pain rating scale (NPRS 0 - 10), a Likert scale (1-7) and Oswestry disability index (ODI 0 - 50), at baseline, at 30 day, at 60 day, at 90 day and at 180 day. The calculations were carried out by using the Statistical Package for Social Sciences software version 21.0 for Windows (SPSS Inc.)

Results

Mean age was 59 ± 10 years, Male/ Female 14 (43,7 %) / 18 (56,2 %). The levels of injections were L3-L4 6,25% (n=2), L4-L5 65,6 % (n=21) and L5-S1 28,1% (n=9). ESI/TESI 26 (81,2 %) / 6 (18,75 %). When compared to baseline measurements there were significant improvements in NPRS and ODI, at 30, 60, 90 and 180 days after injection. Improvement of at least 50% in Likert scale was detected in 30 days 78,1 % (n=25); in 60 days 78,1% (n=25); in 90 days 65,6 % (n=21) and in 180 days 68,7 (n=22).

NPRS baseline 7,3 ± 1,6 points, 30-day 3,0 ± 2,6 points, 60-day 3,4 ± 2,6 points, 90-day 3,6 ± 2,5 points, 180-day 3,1 ± 2,5 points. Change score from baseline to 30-day 4,3 ± 2,7 ($p<0.001$); - to 60-day 3,8 ± 2,8 ($p<0.001$); - to 90-day 3,7 ± 2,6 ($p<0.001$); to 180-day 4,2 ± 2,5 ($p<0.001$) and 90-to 180-day 0,5 – 1,5 (p 0,087).

ODI baseline 22 ± 9; - to 30-day 8 ± 9; - to 60-day 8 ± 8, - to 90-day 10 ± 9, - to 180-day 9 ± 9. Change score from baseline to 30 - day 13,3 ± 9,2 ($p<0.001$); - to 60-day 13,6 ± 8,7 ($p<0.001$); to 90 - day 12,0 ± 9,5 ($p<0.001$); - to 180 - day 13,0 ± 9,7 ($p<0.001$) and 90 to 180 - day 1,0 ± 4,1 (p 0,173)

Confidence interval for relapse probability in 180 - days (95%) total 50 ± 9 % (n=16) p-range 33 – 67 % (error of p 17%). Most often pain return between 60 to 90 days 31,25 % (n=10).

Conclusions

Fluoroscopy guided epidural steroid injections is effective method of radicular pain treatment caused by intervertebral disc herniation and spinal stenosis. Epidural steroid injections reduce radicular pain severity and increase functionality. Our study shows that the optimal duration for second epidural steroid injection is between 60-90 day after baseline.

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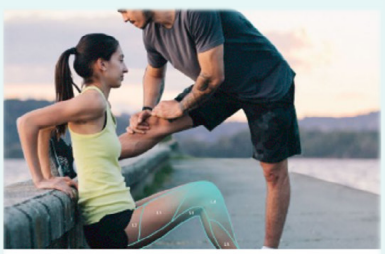

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2. Impact of Prescription Opioid Detoxification on Quality of Life and Pain Levels

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Keywords
prescription opioids, detoxification, chronic pain

Abstract

Purpose

The aim of this study was to examine the impact of detoxification from prescription opioids on the quality of life (QoL) and pain levels among patients reliant on these medications for chronic pain management.

Objective

Long-term use of opioids for pain management may lead to a range of adverse effects, including tolerance, dependence, significant societal costs, and a decline in overall quality of life (QoL)[1]. Despite these challenges, there is a limited number of research focusing on the effects of detoxification and its impact on the QoL for patients with chronic pain dependent on prescription opioids.

Methods

This prospective study included 45 patients who underwent elective detoxification from prescription opioids. Prescription opioids were discontinued during the detoxification treatment in 44 of the 45 cases. QoL was monitored using SF-36v2™ questionnaires administered before detoxification, on the day of discharge, and at least six months after detoxification. Pain levels were assessed using Visual Analogue Scale (VAS) scores before and after the detoxification process.

Results

The study was fully completed by 30 patients. At the third SF-36v2™ evaluation,

1 Baldini, A., Von Korff, M., & Lin, E. H. B. (2012). A review of potential adverse effects of long-term opioid therapy: A practitioner's guide. Primary Care Companion CNS Disorders, 14(3).

25 out of 30 patients (83.3 percent) reported the detoxification treatment as beneficial to their overall health status compared to that before the treatment, and SF-36v2™ questionnaires after detoxification were significantly higher than before the treatment ($p < 0.001$). A decreased pain level right after the detoxification was reported by 44 of the 45 patients (97.7%), with a significant average reduction of 4.51 points observed ($p < 0.001$).

Conclusion

The observed enhancement in QoL, significant reduction in pain, and cessation of opioid use in most patients with chronic pain dependent on prescription opioids following opioid detoxification indicate that this method of treatment can be safely and effectively administered and must be considered for chronic pain patients.

3. Pathogenesis of shoulder impingement

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Keywords
Shoulder joint, impingement, posture

Abstract

The general idea of our presentation is to explain the influence of suboptimal static posture and disturbed movement stereotype on the process of forming of secondary shoulder joint's orthopedics problems.

We also discussed the importance of pathogenetic treatment of those disturbances in the process of rehabilitation and prophylaxis of shoulders joints in future

4. Introducing the perioperative pain registry – PAIN OUT – to the Baltic Countries

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Keywords
Perioperative, Pain, Registry, Quality

Abstract* (required)

Introduction

About 310 million patients undergo surgery every year, worldwide, of which, ~20 million are cared for in Europe. ~50% of these patients report clinically significant pain, which may impede recovery in the short- and long run, indicating that management of perioperative pain may not be optimal.

A patient database or 'registry' is a system that uses observational methods for collecting standardized information about care processes and outcomes in the clinical routine, to evaluate outcomes for a population defined by a particular disease or condition. Registries might operate across multiple sites, regional, national, or international. They can serve clinical, scientific and/or policy-making purposes. A large and constantly growing database permits powerful analysis, modelling for prediction and for generating hypotheses. With functionalities such as feedback and benchmarking, registries can offer a tool for improving quality of care. Registries and randomized controlled studies (RCTs) have complementary roles in evaluating patient outcomes. We are using a registry with the objective of improving management of perioperative pain, internationally.

Methods

PAIN OUT (www.pain-out.eu), is a perioperative pain registry, offering clinicians web-based tools for assessing treatment and multi-dimensional pain-related patient reported outcomes after surgery. Online feedback and benchmarking offers immediate information about patient reported outcomes. Extensive analysis of the rich dataset can be carried out offline. PAIN OUT was established in 2009 with funds from the European Commission and now operates as a not-for-profit academic project, run by a team at the Jena University Hospital, in Germany. Collaborators from >144 hospitals

in Europe, Americas, Asia and Africa have contributed data to the repository which includes datasets from >100,000 patients. Patients fill in the patient outcomes questionnaire in their native language. The validated, multi-modal questionnaire, assesses pain intensity, interference with activity and affect, side effects and perception of care. The majority of data relates to adults; data from children (>4-18 years) is also collected. The principal module addresses care and outcomes on the first day after surgery; methodology for obtaining data up until 12 months after surgery is also available, thus, offering insights to acute and chronic pain related to surgery.

Results

PAIN OUT has been operating in Latvia since 2022. It is now operational in 3 hospitals, 2 of which address care and outcomes in adult patients after surgery and 1 relates to pediatric pain. The majority of adult patients fill in the outcomes questionnaire in Latvian, the Russian version is also used. Collaborators have presented their findings to their own colleagues and at national and international pain and anesthesia meetings.

Conclusions

PAIN OUT offers clinicians standardized and validated tools for measurement and feedback of outcome quality, supporting them in the process of decision making to optimize management of their patient's pain. The large, international database allows assessing findings in 'real life' situations, thereby complementing RCTs in the process of developing evidence. The database provides researchers with opportunities to plan, design and conduct epidemiological and clinical research that should contribute to knowledge regarding prevention and management of post-surgical pain.

5. Multidisciplinary approaches to Improving Patient Experience in Chronic Pain treatment

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Keywords
Collaboration, Multimodal, Biopsychosocial, Adherence, Cost-Effectiveness

Abstract*

Chronic pain remains a significant public health issue, profoundly affecting patients' physical, psychological, and social well-being. Traditional approaches to pain management, often focusing solely on pharmacological treatments, have been shown to inadequately address the complexity of chronic pain. Emerging research supports the effectiveness of multidisciplinary approaches that incorporate the biopsychosocial model, thereby offering a more holistic and patient-centered strategy. This study explores the impact of multidisciplinary approaches on improving the patient experience in chronic pain treatment, emphasizing the integration of medical, psychological, and rehabilitation.

Multidisciplinary interventions, which include components such as cognitive-behavioral therapy (CBT), physical therapy, pharmacological management, patient education, are more effective in enhancing pain relief, functional recovery, and quality of life than monotherapy. These approaches are grounded in the biopsychosocial model, which recognizes that chronic pain is influenced by an interplay of biological, psychological, and social factors. Multidisciplinary care can tailor treatment plans to the individual needs of patients, thereby enhancing therapeutic outcomes and patient satisfaction.

The integration of patient education and self-management strategies within multidisciplinary models plays a crucial role in improving patient experience. Empowering patients with knowledge about their condition and actively involving them in their treatment plan fosters a sense of control and partnership. This empowerment not only contributes to improved adherence to treatment regimens but also enhances patients' ability to cope with pain, reducing its overall impact on daily life.

Multidisciplinary approaches also show promise in terms of cost-effectiveness. By providing comprehensive care that addresses the root causes and contributing factors of chronic pain, these models can reduce the need for more invasive procedures and long-term medication use, which are often associated with higher healthcare costs and potential side effects. The reduction in healthcare utilization, including fewer emergency department visits and hospital admissions, further underscores the economic advantages of multidisciplinary care.

Patient experience is further enhanced through a collaborative care model where healthcare professionals from various disciplines work together to deliver coordinated care. This collaboration ensures that treatment is holistic and consistent, reducing the risk of fragmented care that can arise when different providers operate in isolation. Improved communication and continuity of care inherent in multidisciplinary teams lead to better patient outcomes and higher

satisfaction levels, as patients receive comprehensive support throughout their treatment journey.

Challenges remain in the implementation of multidisciplinary approaches, including the need for effective communication among healthcare professionals and the alignment of healthcare policies to support integrated care models. Nonetheless, the growing body of evidence supporting the effectiveness of these approaches in improving patient outcomes and experiences indicates a need for a paradigm shift in chronic pain management.

Multidisciplinary approaches to chronic pain treatment, grounded in the biopsychosocial model, offer a promising path toward improving patient experience. By addressing the multifaceted nature of chronic pain and fostering a collaborative care environment, these approaches not only enhance clinical outcomes but also promote patient empowerment and satisfaction. Future efforts should focus on optimizing these models for broader implementation, with an emphasis on evidence-based practices, patient engagement, and cost-effective care.

6. Do we have new analgesics in pain medicine?

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Keywords
pain , pain management, opioids, migraine

Abstract*

According to epidemiological data, almost one in five surveyed Europeans experience moderate or severe chronic pain (NRS > 5). Chronic pain negatively affects the quality of life of patients and their families, increases the risk of depression, anxiety, sleep and cognitive disorders. It is also a burden on healthcare systems and society as a whole.

One of the priorities of healthcare systems is to search for methods of prevention and treatment of patients with chronic pain, and one of such research areas is pharmacotherapy. It is assumed that almost 10–15 years pass, with an expenditure of over 1–2 billion dollars, to approve each new drug for clinical use.

Despite the huge financial outlays and hopes placed in analgesic substances effective in preclinical experiments, in the years 2018-2023 the FDA registered only 11 analgesics, 9 of which are drugs used to prevent and treat migraine (gepants, ditans, anti-CGRP antibodies). The remaining drugs are oliceridine - a new opioid analgesic with a complex mechanism of action and elagolix - a hormonal drug used to treat pain in endometriosis. Current clinical trials in humans focus on drugs acting on VGSC sodium channels, VGCC calcium channels and TRP ion channel subtypes (TRPV1, TRPA1), which are involved in physiological and pathological nociception, and in particular in the development of peripheral and central sensitization. In addition, the research area is analgesics acting through the glutamatergic system and mGluR5 receptors. Currently, a clinical trial is being conducted to assess the

efficacy and safety of basimglurant in the indication of trigeminal neuralgia.

New atypical opioid analgesics are also being sought, as well as new formulations of "old" opioids that prevent overdose. In the clinical trial phase, cebranopadol, buprenorphine analogues, dinalbufina are being assessed, i.e. opioids that, due to their multi-receptor mechanisms of action, are characterized by a lower risk of adverse effects, including addiction and risk of overdose.

Clinical trials are also being conducted to assess the efficacy and safety of new formulations of "old" drugs, such as controlled-release pregabalin.

Many substances that were effective in the experiment on laboratory animals did not confirm their analgesic efficacy or caused serious adverse effects in clinical trials. This applies to cannabidiol, anti-NGF monoclonal antibodies (fulranumab), and angiotensin receptor antagonists AT2R (olodanrigan).

Another research area that is most promising in pain medicine is the implementation of chronic pain prevention in the form of vaccination against shingles. Clinical studies have clearly shown that the effectiveness of the Shingrix vaccine in adults is about 90%, in the form of a reduction in the incidence of shingles and a reduction in the risk of postherpetic neuralgia.

In modern pain medicine, the progress that has been made in the area of pharmacotherapy is certainly modern antimigraine drugs and the possibility of preventing postherpetic neuralgia through vaccination. Other research areas are promising, although we do not expect a breakthrough in the search for new, safer analgesics.

7. Evaluation of the results of early and late postoperative pain in elective total hip arthroplasty

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SERGEJS ZADOROŽNIJS, Hospital of Traumatology and Orthopaedics, Riga, Latvia

Keywords
Post operative pain. ERAS

Abstract

Background

Optimal postoperative pain control allows for faster recovery, reduced complications, and improved patient satisfaction. Effective pain management is fundamental to enhanced recovery after surgery.

Multi-modal, a potent opioid and a local anaesthetic technique achieve effective analgesia while limiting the dose and thereby side effects of any one agent.

Aim

Investigate the morphine consumption and the pain NRS at discharge and 6 weeks after hip replacement surgery in aspects of ERAS program due to multimodal approach with local infiltrative anaesthesia with opioid use and patient early mobilization

Methods

A prospective parallel group, randomized study is conducted at the Hospital of Traumatology and Orthopaedics from March 2023. Currently 106 patients are enrolled of which 12 excluded, 5 dropped out, 2 unable achieve by call and 87 finished follow up.

Patients who have eligible and agreed to participate were guided in the pre-operative and post-operative stages according to ERAS principles, which include local infiltration analgesia with 0.75% ropivacaine solution and intravenous dexamethasone 8 mg were administered to patients before surgery.

After surgery, patients were prescribed multimodal analgesia Acetaminophen 1 g i/v at the end of surgery and every 6 hours until 8:00 the next day, continuing with 500 mg x 4 p/o until discharge, as well as Etoricoxib 90 mg p/o administrated.

If the pain NRS exceeded 6 patients received Morphine 10 mg s/c, which was noticed in the protocols. Morphine consumption throughout the hospitalization period is measured. SG (study group) patients receive full meal at least 2 hours after surgery and are verticalized to standing on the day of surgery 5-6 hours after surgery. DVT prophylaxis with enoxaparin 3d and Rivaroxaban for 4w for CG (control group) and Aspirin 100 mg X 2 for 6 weeks for patients.

Pain NRS at rest and during movement on the day of discharge and 6 weeks after surgery is evaluated.

Results

Measurement/group	Study (N 41)	Control(N46)	Sgnificance
Pain at rest discharge (NRS) Median (IR)	0 [0; 1],	2.0 [1; 3]	0.000
Pain at mov discharge (NRS) Median (IR)	2.0 [0; 5]	3.0 [1;7]	0.000
Pain during movement 6 weeks. Median (IR)	0 [0; 1],	1.0 [0; 7]	0.046
Total morphine consumption mg Median (IR)	10.0 [0; 50]	20.0 [0; 130]	0.007

Conclusion

Early patient mobilization and a multi-functional approach contribute to better patient well-being and lower pain intensity.

Lower opioid consumption was observed in SG patients.

Lower pain intensity was observed in SG patients on the day of discharge and 6 weeks after surgery, during movement and at rest.

Low pain intensity is not related to the use of pain killers, as confirmed by patients during the interview conducted 6 weeks after surgery.

8. Efficacy of Transversus abdominis plane block after laparotomy in ICU

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Keywords
TAP block, laparotomy, ICU

Abstract*

Pain is still a major problem in intensive care unit (ICU) patients after laparotomy.

The aim

The aim of this study is to evaluate efficacy of transversus abdominis plane (TAP) block as a part of multimodal pain management approach in patients in ICU in the first 24 hours after laparotomy.

Material and methods

In a prospective randomized trial 40 ICU patients after laparotomy were divided into two groups, 20 patients were included in each group. The study group patients received a bilateral subcostal or posterior TAP block with ultrasound guidance after surgery in ICU, when postoperative pain level according to numeric rating scale (NRS) reached 4 or more point, the control group patients – fentanyl intravenous (IV) infusion if pain level according to NRS was 4 or more point. All patients in both groups received as a part of multimodal analgesia paracetamol, metamizole and gabapentin at regular intervals.

Results

In the study group 7 patients who required fentanyl IV infusion to provide adequate analgesia despite received TAP block mean fentanyl consumption in the first 24 hours was 48% lower than in the control group, while 13 patients did not receive fentanyl at all. The mean postoperative pain level was not statistically significantly different (p=0.0680) between the two groups, it was 3.0 ± 0.4 points in the control group and 2.7 ± 0.5 points in the study group according to NRS. In the control group 2 patients experienced a decrease in consciousness level to Richmond Agitation Sedation Scale -1, meaning they became drowsy, and 1 patient – respiratory depression. None of the study group patients experienced decrease in consciousness level or respiratory depression.

Conclusions

TAP block as a part of multimodal pain management approach provide effective postoperative analgesia and statistically and clinically significant decrease opioid consumption in the first 24 hours after laparotomy in ICU patients. Further research is needed to choose appropriate block approach for a specific operation and adding an adjuvant to prolong block duration of action.

9. ACUTE VS CHRONIC NEUROPATHIC PAIN: DIFFERENTIATING FEATURES AND TREATMENT APPROACHES

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Keywords
Acute, Neuropathic pain

Abstract*

Objective

To examine the distinctions between acute and chronic neuropathic pain, highlighting diagnostic criteria, pathophysiological mechanisms, and treatment strategies.

Methods

This presentation reviews current literature and clinical observations on neuropathic pain, focusing on the transition from acute to chronic states. We analyze

diagnostic criteria, pain descriptors, and treatment approaches for both acute neuropathic pain (ANeP) and chronic neuropathic pain (ChNeP).

Results

1. Diagnostic criteria for ANeP include onset within 30 days of injury, neuroanatomically consistent pain, and at least one sensory impairment.

2. ANeP differs from ChNeP in pain descriptors: acute pain often presents with sharp and deep pain, while chronic pain shows more thermal hyperalgesia and itching sensations.

3. Treatment of ANeP lacks robust clinical trials. Current approaches adapt ChNeP treatments, emphasizing faster-acting medications like pregabalin, lidocaine, and ketamine.

4. Inflammation plays a crucial role in both acute and chronic neuropathic pain, suggesting potential for anti-inflammatory interventions in ANeP management.

5. Perioperative nerve injuries occur in 10-50% of surgeries, with severe cases accounting for up to 10%, emphasizing the importance of prevention and early management.

Conclusions

ANeP and ChNeP show distinct clinical features and may require different treatment approaches. The transition from acute to chronic pain is not inevitable, challenging the concept that chronic pain results from poorly treated acute pain. Future research should focus on ANeP-specific treatments, the role of inflammation, and personalized pain management strategies based on sensory phenotypes. The potential for disease-modifying therapies in neuropathic pain offers promising avenues for future investigations.

10. Aerobic exercise training to improve treatment outcomes in adult patients with fibromyalgia. Theory and our experience

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Keywords
fibromyalgia, chronic pain, physiotherapy

Abstract* (required)

Background

Fibromyalgia (FM) is a chronic pain syndrome characterised by widespread pain, fatigue, and cognitive disturbances. Aerobic exercise has been recognised as an effective non-pharmacological intervention to improve physical and psychological outcomes in FM patients. This study aimed to evaluate the impact of aerobic exercise training, as part of a comprehensive treatment approach, on adult FM patients› outcomes in a clinical setting.

Methods

A total of 103 patients diagnosed with fibromyalgia between 2016 and 2024 at the pain management department of Western Tallinn Central Hospital were analysed. Of these, 98 were included in the final data analysis. Eighty-one patients were assigned to undergo cardiopulmonary exercise testing (CPET); the remaining patients did not participate due to general poor fitness or severe comorbidities. Of the 81 patients assigned to CPET, 53 completed the test. Of those, 52 did not match the pulse interval appropriate for their age. Additionally, the rehabilitation physician performing the CPET diagnosed a functional disorder in 42 patients. Among those who performed CPET, 36 were assigned to group physiotherapy, 28 participated, and 10 continued regular aerobic training at home after completing the physiotherapy sessions. Of these 10 patients, 9 adhered to other aspects of their treatment. Only 5 patients returned for a follow-up CPET two months after completing physiotherapy. Patient adherence to regular therapy, including both aerobic exercise and other modalities, was tracked. Cardiopulmonary performance, physical endurance, and overall symptom improvement were evaluated using self-reported data.

Results

Among the 81 patients assigned to CPET, 65.4% completed the test, with 79.2% of participants demonstrating a functional disorder, and 98.1% did not match the age-appropriate pulse interval. The only patient who matched the pulse interval was involved in high-endurance sports before being diagnosed with FM. Of all patients who underwent CPET, 67.9% were assigned to group physiotherapy, and 52.8% attended the sessions. Only 18.9% of those who completed CPET engaged in aerobic exercise at home after the physiotherapy sessions. Patients who exercised regularly reported feeling subjectively better, though not necessarily experiencing a reduction in pain. In the total patient cohort, only 36.7% continued regular therapy, regardless of the modality.

Conclusion

Data from our department suggest significant dropout rates from exercise programmes, despite potential benefits for pain reduction, cardiovascular health, and functional capacity. Adherence to any form of therapy for FM is low. Patients who continued regular exercise at home were generally more adherent to FM management overall. Greater efforts should be directed towards improving patient adherence to therapy in general, and specifically to regular exercise at home.

11. LESSONS FROM POSTGRADUATE EDUCATION IN PAIN MEDICINE IN LITHUANIA

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Keywords
Pain medicine, postgraduate education, multidisciplinary

Abstract* (required)

Background

Chronic pain is a huge burden and the major problem for society. It is generally agreed that the key to solving the problem can only be the possibility of multimodal management. Pain medicine is the central forward in this play. That is why the training in pain medicine should be multidisciplinary. However, so far curricula in pain medicine worldwide are very different. Firstly, it concerns a) level of study (residency vs. professional qualification improvement); b) content of multidisciplinary (ratio of theory / practice and ratio therapeutic / invasive).

The aim of this study

To present the Curriculum in Pain medicine taught at the Lithuanian University of Health Sciences (LUHS) and to assess whether it meets the expectations of participants aspiring to become pain doctors

Methods

The curriculum program was examined by lining method and the reflexion from participants – by open questionnaire containing 17 items.

Results

The Curriculum in Pain medicine at the LUHS is led by Neurology department and conducted as professional qualification improvement primary course intended for all specialty doctors. The scope of the course is 200 academic hours including lectures - 84, practical work – 42, independent studies – 54, workshops – 15, and exam – 5 hours. The content of the course consists of three parts: 1. Theoretical bases of pain; 2. Therapeutical aspects of pain medicine; 3. Interventional aspects of pain medicine. The teaching staff consists of 24 persons from 16 structural units of the LUHS. Lecturers from Neurology and Anaestesiology departments dominate as for contacting hours with participants. The exam has three parts: 1. Clinical case presentation. 2. Theoretical test. 3. OSCE stations.

4 courses completed in the 5 years period 2019-2023 (2021 canceled because of Covid-19), and 42 physicians been graduated. The reflexion from the doctors did show the following: i) overall course evaluation (0-10 scale) – 8.67 (range 7-10); ii) theoretical bases of pain – 9.17 (8-10); iii) therapeutical aspects of pain medicine – 8.75 (7-10); iiii) interventional aspects of pain medicine – 8.67 (7-10). Insufficient training of practical skills was the only negative assessment expressed by doctors – 66.7 % answers. The multidisciplinary approach of the course was approved by 100%.

Conclusions

1. Postgraduate education in Pain medicine in Lithuania is achievable by professional qualification improvement primary course.

2. The course is prepared by curriculum based on multidisciplinary approach

3. The doctors evaluated the course positively, except for insufficient teaching of practical skills

12. Novel Neuromodulation Techniques: Mechanism of Action and Indications of BURST-DR SCS and DRG Stimulation

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Keywords
BURST-DR SCS, DRG stimulation

Abstract* (required)

This presentation explores the mechanisms of action and clinical indications for BURST-DR spinal cord stimulation (SCS) therapy and dorsal root ganglion (DRG) stimulation.

BURST-DR SCS utilizes a unique stimulation pattern that mimics natural neural firing, providing effective pain relief while minimizing side effects. This therapy is particularly indicated for patients with chronic pain conditions, including failed back surgery syndrome, complex regional pain syndrome, and neuropathic pain. In contrast, DRG stimulation targets specific dorsal root ganglia and their nerve roots to modulate pain pathways more selectively, making it ideal for localized pain conditions such as post-surgical pain and complex regional pain syndrome. By comparing these two innovative therapies, we aim to highlight their distinct mechanisms, clinical applications, and the potential for personalized pain management strategies.

13. When the Pressure Drops: Solving the Puzzle of Intracranial Hypotension.

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Keywords
SIH, CSF, intracranial hypotension

Abstract* (required)

Spontaneous intracranial hypotension (SIH) is an underdiagnosed condition characterized by orthostatic headaches resulting from cerebrospinal fluid (CSF) leakage. Unlike secondary intracranial hypotension caused by trauma or procedures like lumbar punctures, primary SIH derives from spontaneous CSF loss, often without a clear trigger. It is important to distinguish SIH from post-dural puncture headaches and other conditions such as shunt hyperfunction and traumatic skull fractures.

Clinical presentation is often vague. Thus, key diagnostic tool includes multimodal brain MRI, with features of pachymeningeal enhancement, subdural hygromas, widening of venous sinuses, narrowing of subarachnoid cysterns and spine MRI with a sign of spinal longitudinal extradural CSF collections. Digital subtraction myelographty has recently gained rising attention due to ability precisely pinpoint level of CSF loss due to dural defect, which can be divided in to ventral leak (Type I), lateral leak (Type II) or leak due to CSF-venous fistula (Type III). However, CT-myelography to this day serves as a gold standard due to higher resolution and larger field of view.

Finding precisely dural defect directs apropriate treatment, which includes several options ranging from conservative approaches like hydration and bed rest for postdural headaches and to more invasive interventions such as epidural blood patches, open surgery or endovascular treatment for primary SIH. Type I and Type II leaks are mostly managed with open surgery due to low long term efficacy of blood patch. Endovascular treatment of Type III leak has recently gained attention and first large patient group review show promising results.

With advancements in imaging techniques like dynamic myelography and targeted treatment methods, the management of SIH is evolving, offering better outcomes for patients. Thus, there is a need of further research to develop guidelines with more focus on the patients, to distinguish group with a need of more aggressive treatment in comparsion to watchfull waiting group. Nevertheless, multidisciplinary team work in the following years will lead a significant shift in diagnostic and treatment paradigms of SIH over the next few years.

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October 11–12, 2024

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