EFIC5-0016

THERAPEUTIC TOUCH TM IN A GERIATRIC PALLIATIVE CARE UNIT - A RETROSPECTIVE REVIEW

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Introduction

Complementary therapies are increasingly used in palliative care as an adjunct to the standard management of symptoms to achieve an overall well-being for patients with malignant and non-malignant terminal illnesses. A Therapeutic Touch Program was introduced to a geriatric Palliative Care Unit in October 2010. Two volunteer Therapeutic Touch Practitioners offer the therapy to patients who have given verbal consent.

Objective

To conduct a retrospective review of Therapeutic Touch services provided to patients in an in-patient geriatric palliative care unit to better understand the impact of the Therapeutic Touch Program on patient care.

Methods

A retrospective medical chart review was conducted on both patients who received Therapeutic Touch as well as a random selection of patients who did not receive Therapeutic Touch.

Client characteristics and the Therapeutic Touch Practitioners' observations of the patient's response were collected. Descriptive analyses were conducted on all variables.

Results

Patients who did not receive Therapeutic Touch tended to have lower admitting Palliative Performance Scale scores, shorter length of stay and were older.

Based on the responses provided by patients and observed by Therapeutic Touch practitioner the majority of patients receiving treatment achieved a state of relaxation or sleep.

Conclusions

The results of our chart review suggest beneficial effects for significant numbers of participants and deserve a more robust comparison study in future. Recommendations also include revising the program procedures to improve processes and documentation, and ensure all or most patients are offered the therapy.

EFIC5-0017

DISC PROLAPSE TREATMENT BY INTEGRATED SYSTEM

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COMMON PROBLEMS DUE TO DISC PROLAPSES AND HERNIATION

Many patients suffer with back pain, legs pain or weakness of the lower extremities of muscle are diagnosed with a herniated disc.Some patients come to Physicians for treatment of pain at both legs and backache with weakness. Some doctors diagnose for Lumbago Sciatica and some of them for PLID

Accordingly patients are treated with Physiotherapy and Medicine at the primary stage. Due to application of pain killer Medicines, patients feel pain free at some extent, but it is revived again when Medicine & Physiotherapy are stopped.

Gradually, the case converted into Paraplegia.

Most of Neuro Surgeons and Orthopedics advised to the patients for Leminectomy to relief the instant pain.

Anatomy of Normal Lumbar Disc

In between each of the 5 lumbar vertebrae is a disc, a tough fibrous shock-absorbing pad. Endplates line the ends of each vertebra and help hold individual discs in place

Each disc contains a tire-like outer band (called the annulus fibrosus) that encases a gel-like substance (called the nucleus pulposus).

When a disc herniation occurs, the cushion that sits between the spinal vertebra is pushed outside its normal position

EFIC5-0027

NEW PROGRAM FOR ESTIMATION DEGREE THE SEVERITY OF THE PATIENT

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Based on previously developed a universal analytical system of the physiological state of the body (PHUAS) by the author proposed a new automatic program objective assessment of the severity of the patient's condition. Overall, the program can improve health of the population in terms of underfunding by the rapid and objective examination of a large quantity of people. Early on, with the help of the developed program is made possible among surveyed identify risk groups in the severity of general condition, to determine the optimal and effective options for prevention and treatment, saving time and money for the survey, use the data to correlate them with various factors influence of the environment (ecology, nutrition, addictions, drug, vaccine, methods of intensive therapy, pharmacotherapy, etc.).

EFIC5-0056

HOLISTIC RESTORATION OF TOTAL PAIN - THE IMPORTANCE OF REMEMBERING SANCTITY OF LIFE AND PRAYER

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The human consists of body, mind and soul. Total pain involves physical, mental, social and spiritual aspects (Saunders). Social means relations with others and spiritual means relations with the Absolute. Human soul exists in the core of the man and the four elements of pain are not separated but combined and integrated. In Moses' Ten Commandments, "Don't murder", and in the five commandments of Buddhism, "Don't kill any life." We should respect the personality of every patient. I have recommended remembering the sanctity of life, which may lead to the holistic restoration. Holistic respect and prayer for pain patients plays an important role in medical management. We often experience our patients' recovery from critical state when the patient is regarded as a precious person who has sanctity of life and when the tender hearted medical staff recognized their pain as total pain. I presume that all kinds of pain is also total pain. It is described in Christian theology, that the Creation, the Fall and the Atonement represent the human state of spirituality. Reconciliation of pain patients with other persons or God may lead to social restoration or spiritual restoration of pain. The resolution of indivisual problems of sin and compassionate respect of sanctity of life may result in holistic restoration for all pain patients. Angel said to Mary, "Do not be afraid.--For with God nothing shall be impossible"(KJV Luke1:37) Calling the name of patients is important for holistic restoration. I report holistic restoration of total pain.

EFIC5-0081

FEASIBILITY OF CONTRALATERAL OBLIQUE FLUOROSCOPY-GUIDED CERVICAL INTERLAMINAR STEROID INJECTIONS

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Background: Cervical epidural steroid injection (CESI), given in conjunction with local anesthetic, is common remedy for cervical radicular pain and is generally performed under c-arm fluoroscopic guidance, computed tomography (CT), or ultrasound. Interlaminar procedure, such as CESI, typically relay on anteroposterior and lateral (APL) view during needle placement. However lateral view may be obscured by body habits in certain individuals. Swimmer's view or contralateral oblique (CLO) view may be used to avoid this.
Objective: Our intent was to assess technical success and procedural risk in patients subjected to imaged-guided CESI procedure, comparing CT with CLO c-arm fluoroscopy
Methods: A total of 186 of patients were enrolled and randomly assigned to one of three groups undergoing imaging-guided CESI (dexamethsone, 5 mg) via CT or c-arm fluoroscopy (CLO vs APL). Complication rates and technical success were assessed, basing the latter on image reviews to confirm presence of epidural contrast.
Result: All image-guided CESI procedures utilizing CT and CLO fluoroscopy proved technically successful. A swimmer's viewwas required in two patients assigned to APL views. Injection were performed at cervical level, from C5-6 to C7-T1, with C6-7 level most commonly injected.
Conclusion: CLO fluoroscopy-guided CESI is feasible and safe, comparing favorably with CT-duided CESI

EFIC5-0101

ANTIMICROBIAL ACTIVITY OF LIDOCAINE, BUPIVACAINE, MEPIVACAINE AND ROPIVACAINE ON STAPHYLOCOCCUS EPIDERMIDIS, STAPHYLOCOCCUS AUREUS AND BACILLUS SUBTILIS

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Introduction

Various studies have shown a possible antimicrobial activity of different local anaesthetics, which may affect results in microbial assessment of biopsies. The purpose of this study was to test the antimicrobial activity of different commonly used anaesthetic agents on *Staphylococcus epidermidis*, *Staphylococcus aureus* and *Bacillus subtilis.*

Methods

Local anaesthetics tested were commercially available solutions of lidocaine, bupivacaine, mepivacaine and ropivacaine. Equal portions of bacterial dilution and 10 µl of different local anaesthetic dilution placed on wafers were added to Mueller Hinton Agar and cultured at 35°C. After 24 hours, a zone of inhibition around the wafers was evaluated.

Results

Local anaesthetics in different concentrations did not show any zone of inhibition on *Staphylococcus epidermidis*, *Staphylococcus aureus* or *Bacillus subtilis*. Tests were repeated with undiluted local anaesthetics but with lower densities of microorganisms. After culturing for 24 hours at 35°C there again was no zone of inhibition on tested bacteria.

Discussion

Considering the literature, antimicrobial activity of local anaesthetics could lead to false-negative results in microbial assessment of biopsies. However, different studies showed that local anaesthetics did not have any antimicrobial effects. Due to these inconsistent results this study was conducted to evaluate the antimicrobial effects of different commonly used anesthetic agents.

Conclusion

Neither lidocaine, bupivacaine, mepivacaine nor ropivacaine showed an antibacterial effect on *Staphylococcus epidermidis*, *Staphylococcus aureus* and *Bacillus subtilis*. Due to these findings local anaesthetics can be used in clinical routine to perform pain free diagnostic procedures in which culture specimens are to be obtained.

EFIC5-0159

TOLERABILITY TO PAIN IS ASSOCIATED WITH DECREASED CONDITIONED PAIN MODULATION: A HEALTHY VOLUNTEERS STUDY

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Background:There is tremendous variability in the perception of pain produced by anidentical noxious stimulus across individuals. This study investigated the profileof pain sensitivity and endogenous pain inhibition measured by conditioned painmodulation (CPM) in two distinct subgroups that were sorted from a large cohortof healthy subjects based on their tolerability to cold stimulation.

Methods:Data from 486 subjects was retrieved from a pool studies conducted in ourlaboratory. Pain tests included heat and cold stimulations and CPM paradigm.

Results:The mean cold pain tolerance of the total sample was 46.5±48.0sec, (range4-180sec). Of those, two extreme subgroups were sorted: 'tolerant' including 8%of the sample (n=41) who reached the cut-off time (180sec), and a sized-match 'intolerant'that were at the other edge of the tolerance time range (≤ 11 sec,mean±SD 8.7±2sec). Significant differences between subgroups were found in all thermaltests ($p<0.001$) implying that the 'tolerant' is insensitive to pain. CPM magnitudewas significantly lower in the 'tolerant' compare to the 'intolerant' (15±17 vs.24±15, respectively; $p=0.001$). Interestingly, pain intensity induced by theconditioning stimulation and the first test pain (part of the CPM paradigm) weresignificantly lower in the 'tolerant' compare to the 'intolerant' (conditioning:36±22 vs. 82±20, respectively; $p<0.001$; test pain 31±25 vs. 64±25 respectively; $p<0.001$)

Conclusions: Tolerabilityto pain is associated with insensitivity to multimodal evoked pain. Also,tolerant individuals have different pain inhibition profile that can be explainedby their general low pain perception that avoids 'turning on' endogenous paininhibition.

EFIC5-0181

THE RELATIONSHIP BETWEEN PAIN BELIEFS AND COPING WITH PAIN OF ALGOLOGY PATIENTS

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Background and aims: The patient's beliefs, expectations, attitudes of coping with pain are effective on thepatient's pain control. The aim of the investigation was to evaluatecorrelation between pain beliefs and coping with pain of algology patients'.

Methods: This descriptive study wascarried out with 201 patients at a University Hospital, Algology Clinic between15 May-15 July 2014. The research instruments were used a DescriptiveCharacteristics Questionnaire, The Pain Beliefs Questionnaire(PBQ) and the PainCoping Questionnaire(PCQ). Data were evaluated by descriptive statisticalmethods, Spearman's correlation, Mann-Whitney U and Kruskal-Wallis test.

Results: According to the findings; patientshad duration of pain ranged from 1 month to 40 years, the average of pain duration was 68.37±89.42 months. Patients'organic beliefs average score was 3.97±0.78, psychological beliefs average score was 5.01 ±1.01. Between patients' organic beliefs score self-management($p < 0.001$, $r = -.388$) and conscious cognitive interventions score($p < 0.001$, $r = -.331$)was a significant negative correlation, with a helplessness score($p < 0.001$,$r = .365$) was a positive correlation. Between patients' psychological beliefsscore and self-management score was a positive correlation($p<0.05$, $r= .162$).Moreover, there was significant difference between organic beliefs score andpatients who use opioid analgesic.

Conclusions: Patients who have beliefs ofpain's origin is a organic causes such as damage and harm in the body, cannotcope with pain and feel more helplessnes. Pain beliefs should be implemented tonursing care plans on pain management.

EFIC5-0251

LIVE WITH ENDOMETRIOSIS: QUALITATIVE APPROACH OF SOCIAL MEANING INVOLVED IN CHRONIC PAIN

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The symptoms associated with endometriosis may have an impact on the physical well-being, emotional and social development of affected women, so it is essential to evaluate women's complaints, and give you time to express their concerns and anxieties. Because of its chronic and progressive condition, endometriosis causes symptoms that affect the daily lives of women who suffer from this painful condition, especially with regard to the isolation social.
Many epidemiological evidences suggest that social ties are important to human health. Lack of social integration may be associated with poorer health outcomes and impaired quality of life. In human species evolution, social structures evolved in parallel with neural, hormonal, genetic, and molecular mechanisms to support them. Social networks are essential for humans to survive, reproduce, and transmit a genetic legacy. Social ties may have important implications for physical as well as psychological well-being for patients with chronic diseases.

Thinking this scenario, our goal was to investigate how endometriosis can interfere corroborating the social isolation of women living with chronic pain.

EFIC5-0254

NEGATIVE ILLNESS PERCEPTION AND A PRO-NOCICEPTIVE PAIN MODULATION PROFILE AUGMENT CHRONIC PELVIC PAIN SYNDROMES

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Background and aims: Pain-related psychosocial and behavioral characteristics are common in women who suffer from chronic pelvic pain syndrome (CPPS). This study aimed to explore whether the negative illness perception in Painful Bladder Syndrome (PBS) and Provoked vestibulodynia (PVD) patients is associated with a pro-nociceptive pain modulation profile (PMP), as well as enhanced severity of the clinical CPPS.

Methods: CPPS patients (n=39) completed the Illness Perception Questionnaire Revised (IPQ-R) and the Urgency Severity and Life Impact Questionnaire (USIQ). Heat pain thresholds, mechanical temporal summation (mTS), and conditioned pain modulation (CPM) were tested at the forearm. Pain evoked by intercourse and stimulation of the trigger point at the pelvic floor were used to indicate the severity of CPPS.

Results: Negative illness perception expressed by CPPS patients as chronic and harmful feelings towards their situation were correlated with less-efficient CPM (r=.488, p=0.002 and r=0.359, p=0.025, respectively). Lower sense of controllability toward CPPS was correlated with enhanced mTS (r= 0.365, p= 0.022). Enhanced perception of CPPS as being a chronic condition was correlated with higher mechanical and trigger point evoked pain scores (r= 0.405, p=0.011 and r=0.366, p=0.028, respectively).

Conclusions: Our findings point to the unique role of cognitive representations and psychological factors in determining the individual PMP, as well as the clinical CPPS manifestation. These observations suggest that CPPS women with a negative illness perception and a pro-nociceptive PMP necessitate suitably tailored interventions in which their cognitive and emotional representations of CPPS are taken into consideration.

EFIC5-0264

REGULATION OF NEURONAL ACTIVITY OF THE ANTERIOR CINGULATE CORTEX COULD RELIEVE MECHANICAL ALLODYNIA.

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The neuronal activity of anterior cingulate cortex (ACC) has been proved to up-regulated after pain. However, if to cease the upregulated neuronal activity can relief pain remains to be questioned. We hypothesized that suppressing the upregulated neuronal activity could relief the painful condition, by using medical agent, optogenetic and chemogenetic tools. By musimol, a selective $GABA_A$ receptor agonist, intracerebral injection, mechanical pain threshold measured by von frey could be elevated which is low after bone cancer pain establishment. By AAV-Halorhodopsin injection in ACC, laser trigger behavioral change. By AAV-hMD4 injection in ACC, the chemical agent, CNO, could relieve mechanical threshold.

EFIC5-0289

IBUPROFEN/CAFFEINE IS A SUPERIOR ANALGESIC COMPARED TO IBUPROFEN, CAFFEINE AND PLACEBO: A RANDOMIZED, PLACEBO-CONTROLLED TRIAL IN PATIENTS WITH POSTOPERATIVE DENTAL PAIN

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Background and aims:

To investigate efficacy and safety of a fixed dose combination (FDC) of ibuprofen/caffeine (400/100mg) versus ibuprofen (400mg), caffeine (100mg) and placebo on postsurgical dental pain. Ibuprofen and caffeine both have a well-established safety profiles over a long history of use.

Methods:

Randomized, active- and placebo-controlled, double-blind, single-centre, 2-stage parallel group study in patients undergoing dental surgery, reporting baseline dental pain intensity of at least moderate on a 4-point verbal rating scale and ≥5 on a 0 to 10 numerical pain rating scale. Primary endpoint: time-weighted sum of pain relief and pain intensity difference (PID) from 0 to 8 h (SPRID0-8h); secondary endpoint: SPRID0-2h.

Results:

562 patients were randomized and treated (FDC: 213; ibuprofen: 209; caffeine: 70; placebo: 70). Overall, about 58% suffered from severe pain; mean (SD) pain intensity was 7.7 (1.09).

The primary endpoint was met. Adjusted means (SE) for $SPRID_{0\text{-}8h}$ were: FDC, 52.291 (2.027), ibuprofen, 40.165 (2.047), caffeine, 15.824 (3.525), placebo, 10.554 (3.527). $SPRID_{0\text{-}2h}$, values were: FDC, 10.584 (0.404), ibuprofen, 6.990 (0.408), caffeine, 2.612 (0.702), placebo, 2.059 (0.703) ($p<0.0001$ for all comparisons of the FDC versus comparators). Even at 8h post-dose PID was larger for the FDC (4.074 (0.187), compared to ibuprofen (3.519 (0.195), $p=0.0398$. All treatments were safe and well tolerated.

Conclusion:

Ibuprofen/caffeine 400mg/100mg reduced moderate to severe postsurgical dental pain between 0-8h more effectively compared to ibuprofen alone, caffeine, and placebo. Ibuprofen/caffeine provided 30-50% stronger pain reduction over 0-8h and 0-2h, compared to ibuprofen alone.

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EFIC5-0323

LONG TERM BLOOD PRESSURE CONTROL EFFECT OF CELIAC PLEXUS BLOCK WITH BOTULINUM TOXIN

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Background

Celiac plexus block (CPB) is an interventional technique utilized for diagnostic and therapeutic purposes in the treatment of abdominovisceral pain. The celiac ganglionic plexus contains the majority of the sympathetic neurons innervating the splanchnic organs and tissues. In the animal study, celiac ganglionectomy involves surgical removal of the celiac ganglionic plexus, and has been used to study the roles of the splanchnic sympathetic innervation in cardiovascular regulation.

Methods

18-year-old male patient, who is diagnosed of uncontrolled malignant hypertension 4 years ago, is referred to our pain center from cardiologist. Four more than antihypertensive drugs are used.We performed celiac plexus block with local anesthetics (0.4% lidocaine 12cc in each side). As a result, patient's systolic and diastolic BP was dropped for a few days. We performed CPB with botulinum toxin (100 IU) to this patient. While one month observation after CPB with botulinum toxin, patient's systolic BP was controlled under 160 mmHg, diastolic BP was controlled under 100 mmHg, with the same medication in usual. We performed secondary with botulinum toxin to this patient. Untill now (After 4 months), patient's systolic BP has been declined to under 160mmg and controlled well.

Result

Uncontrolled hypertension, we can expect a declining effect on patient's BP with CPB procedure. With local anesthetics, there is a short tem effect, but with botulinum toxin, we can expect a long term effect.

Conclusion

With CPB procedure with botulinum toxin, we can expect a long term effect of dropping the BP on these patients who have uncontrolled hypertension.

EFIC5-0340

EVALUATION OF THE IPHONE PAIN ASSESSMENT APPLICATION FOR USE IN THE PARAMEDIC PRE-HOSPITAL SETTING: TO IMPROVE PAIN ASSESSMENT IN PEOPLE WITH DEMENTIA

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Aims

Pain assessment in older adults with cognitive impairment is often a challenge and paramedics are not given sufficient tools/training to assess pain. The development of this App may improve pain assessment, and in turn management, in this vulnerable population. The aim of this study was to evaluate the use of the iPhone pain assessment application as a tool for use in clinical paramedic practice to improve pain assessment of older adults with cognitive impairment.

Methods

Focus groups with paramedic students and a Delphi panel of qualified paramedics were conducted. Participants looked over the app and the paper-based algorithm from which the App was developed. The potential use for the App was discussed. Focus groups were recorded and transcribed verbatim, analysed using a framework approach. Proposed recommendations were disseminated to the Delphi panel who reviewed the App and recommended changes.

Results

24 paramedic students from two UK ambulance services attended focus groups. The overall opinion of the pain assessment App and its potential were very positive. Recommended changes were grouped into three key areas: Use of technology in paramedic setting; Specific App based changes; General changes. The Delphi panel subsequently ordered the changes in terms of priority.

Conclusion

Results indicate that the iPhone pain assessment App provides a useful tool in the pre-hospital setting. By providing access to a tool specifically developed to help identify/assess pain in a user-friendly format, we are likely to see improvements in pain management and subsequently improved quality of life for the adult with dementia.

EFIC5-0344

PHASE III TRIAL TO EVALUATE THE EFFICACY AND SAFETY OF ETODOLAC-LIDOCAINE PATCH IN THE TREATMENT OF ACUTE LOW BACK PAIN

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Etodolac-Lidocaine Topical Patch 4.4% w/w (MRX-7EAT)is a novel, selective COX-2 inhibitor, non-steroidal anti-inflammatory drug(NSAID) patch, developed by using a novel transdermal delivery system based ona proprietary ionic liquid technology. We conducted a Phase III, randomized,multi-center, double-blind, placebo controlled study in the U.S. to evaluatethe safety and the efficacy of MRX-7EAT once daily application for 14 days in thetreatment of acute low back pain. Subjects with the onset of the currentepisode ≥ 3 and ≤ 7 days and a Current Pain Intensity (CPI) of ≥ 4 but ≤ 6 on an 11-point were eligible for the trial. This studyenrolled 232 subjects aged in 14 years old or older at 7 sites for 6 months,from December 2013 to May 2014. TheSummed Pain Intensity Difference (SPID) score change from baseline to Day 8 asthe primary endpoint was numerically greater in the MRX-7EAT group vs. theplacebo group. This difference was not statistically significant in the ITTpopulation ($p<0.068$), but did show statistical significance in the PPpopulation ($p<0.049$). Further, the MRX-7EAT patch performed numericallybetter than the placebo patch in other endpoints including treatmentsatisfaction and time to resolution of pain. There were no deaths and noserious adverse events (AEs). AEs affected about 13% of subjects in bothgroups. Most AEs were mild. Etodolac-Lidocaine Topical Patch is safe and ismore effective for the treatment of pain due to acute low back pain thanplacebo.

EFIC5-0345

SIX MONTHS OF TREATMENT WITH METHYLPHENIDATE AFTER TRAUMATIC BRAIN INJURY WITH FOCUS ON MENTAL FATIGUE, COGNITIVE FUNCTIONS AND SAFETY

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Background and aims: Traumatic brain injury (TBI) may cause long-lasting post-concussive symptoms, such as mentalfatigue and concentration difficulties and this maybecome the main hindrance for TBI victims for returning to work and studies. Thereis currently no effective treatment for long-lasting mental fatigue. This isthe first long-term intervention study with methylphenidate exploring theeffects on mental fatigue, cognitive function and safety.

Methods: Thirty participants whosuffered from long-term post-concussion symptoms after a mild TBI or TBI andwho had reported positive effects with methylphenidate during a three monthsstudy were included in this follow-up study, and were treated withmethylphenidate for a further six months.

Results: The effects on Mental Fatigue Scale (MFS) andcognitive function (processing speed, attention, working memory) were significantlyimproved compared to baseline data recorded before start of the whole project($p<0,001$). The effect after afurther six months was not changed compared to the improvement reported during thefirst 3 months.

Conclusions: Individuals suffering fromprolonged symptoms after TBI reported reduced mental fatigue and improvedcognitive functions with long-term methylphenidate treatment. The effect wasstable and no adverse effects were reported during the 6 months studied. It issuggested that methylphenidate can be a treatment option for long-term mentalfatigue and cognitive impairment after TBI.

EFIC5-0410

THE EFFECT OF DOPAMINE AGONIST (APOMORPHINE) ON COLD PAIN IN PATEINTS WITH CHRONIC RADICULAR PAIN

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Background and aims: Although a few small sized clinical trials suggest that dopaminergic agents reduce pain in patients with various forms of neuropathic pain (NP), the efficacy of dopamine agonists for NP remains questionable. This randomized, double blinded, placebo-controlled, cross-over study was aimed to explore the effect of the dopamine agonist apomorphine on evoked cold pain in patients with lumbar radicular NP.

Methods: Data was collected from 35 patients (18 men, 17 women, mean age 56±13 years). Pain threshold and tolerance in response to immersing one hand in cold water (12^0C) were measured before (baseline) and 30, 75 and 120 min subsequent to subcutaneous injection of 1.5 mg apomorphine or placebo in two separate sessions. Pain intensity and tolerance in response to application of ice pack to the most painful site in the affected leg were also tested.

Results: 120 min following apomorphine (but not placebo) injection, cold pain threshold and tolerance in the hand increased significantly compared to baseline (from 9.3±6.8 to 12.1±9.7 sec, $p<0.01$ and from 31.9±28.2 to 46.5±52.0 sec, $p<0.01$, respectively). Also, in the most painful site, cold pain tolerance increased (from 60.0±50.1 to 74.9±58.0 sec, $p=0.02$) and the maximal cold pain intensity decreased (from 77.3±22.6 to 66.2±33.2, $p<0.01$).

Conclusions: These findings are in line with previous results from our laboratory, which showed that apomorphine prolonged experimental cold pain tolerance in healthy subjects. These findings suggest that that dopamine agonists exhibit analgesic properties on evoked cold pain both in healthy subjects and in patients with NP.

EFIC5-0452

BIOETHICAL ANALYSIS OF THE AUTONOMOUS DECISION OF THE PATIENT WITH CHRONIC PAIN TO THE ACCEPTANCE OF OPIOID DRUGS

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Introduction: It is considered that the patient receiving full information about their drug treatment with opioids, according to their understanding and their families will have more tools to make a free and informed decision and improve compliance, which will increase the effectiveness, safety profile and cost of opioid analgesic. Moreover, knowing the reasons that influence or determine the patient's decision to accept or refuse treatment with opioid drugs, allow us to design strategies to improve acceptance and adherence to long term.

The aim of this study is to describe the information provided by the physician of the pharmacological treatment with opioids and understanding the reasons why a patient decides to be treated with opioids.

Methods: Prospective, single-center, observational study developed at the Pain Unit of Alicante General Hospital during 12 months. This will be conducted in regular monitoring visits of 250 patients from the Pain Unit. Medical history information concerning the characteristics of chronic pain, socio and demographic characteristics, presence of adverse drug reactions and the reasons why patients decided to be treated with opioids will be collected.

EFIC5-0465

EFFECTS OF A TAILORED POSITIVE PSYCHOLOGY INTERVENTION ON WELL-BEING AND PAIN IN INDIVIDUALS WITH CHRONIC PAIN AND A PHYSICAL DISABILITY: A FEASIBILITY TRIAL

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Background: Chronic pain is a significant problem in individuals with physical disabilities deteriorating physical and psychological well-being. Strength- and resource-based interventions (positive-psychology) have been effectively applied to the general population to enhance well-being and reduce depression and anxiety.

Aim: To determine feasibility, acceptability, and efficacy of a computer-based positive-psychology-intervention in individuals with a physical disability and chronic pain.

Methods: We conducted a community-based, single-blinded, randomized, controlled, parallel group trial in persons with spinal cord injury, multiple sclerosis, neuromuscular disease, or post-polio syndrome, with pain intensity of ≥4 (0-10) at least half the days in the past month. Participants in the intervention-group were instructed to practice 4 personalized positive-psychology exercises during 8 weeks. Participants in the control-group were instructed to write about life details. At baseline, post-treatment, and 2.5 months follow-up,
participants completed online well-being and pain-related questionnaires and rated treatment-satisfaction.

Results: Sixty-eight participants completed follow-up assessment. The positive-psychology-intervention resulted in immediate significant increases in positive affect and control over pain and significant decreases in depression, pain intensity, pain interference and catastrophizing, relative to no change in the active control treatment. Both groups showed improvements in life satisfaction. Significant changes in enhanced pain control and reduced pain interference maintained at 2.5 months follow-up. Average treatment satisfaction ratings were between “somewhat satisfied” and “very satisfied”.

Conclusion

The results support the potential efficacy of a positive-psychology-intervention for improving multiple outcomes in individuals with physical disabilities and chronic pain. The findings indicate that a full size trial of the intervention is warranted.

EFIC5-0474

PAIN AND DISABILITY IN PATIENTS WITH CHRONIC BACK PAIN DURING EXERCISE TREATMENT: THE ROLE OF SUBGROUPS BASED ON THE AVOIDANCE-ENDURANCE-MODEL

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Background/Aims

Patients with high fear-avoidance (FAR) as well as high endurance responses (distress-endurance DER, eustress-endurance EER) to subacute low back pain have been shown to benefit less from primary care or from surgery than patients with an adaptive response pattern (AR). However, little is known about possible subgroup differences during exercise treatment.

Methods

104 patients suffering from chronic back pain (> 3 months) completed the Avoidance-Endurance-Questionnaire (AEQ), the Beck Depression Inventory for Primary Care (BDI-PC), the Von Korff Disability Scale (DS) and rated average pain intensity on a 0-10 numerical rating scale during the first weeks of exercise treatment (T0). 65 patients further completed outcome measures 6 months later (T1). A repeated-measures analysis of variance was computed to calculate main effects for AEM-subgroup (FAR, DER, EER, AR) and within-group variance for time (T0,T1).

Results

Regarding pain intensity, the results revealed a significant time effect ($p<.05$) indicating an overall decrease of pain. Further, we found a significant group effect ($p<.05$) with DER patients displaying significantly higher scores compared to EER and AR patients. Concerning disability, a significant group effect ($p<.001$) occurred with DER showing higher scores at both assessment times compared to all other subgroups. Interestingly, FAR and the EER patients showed low pain and disability levels, both comparable to AR patients.

Conclusions

Although the study provides evidence that exercise treatment reduces pain in all patients, DER patients remain to be a problematic group in this setting. By contrast, FAR and EER patients may particularly benefit from exercise treatment.

EFIC5-0487

THE EFFECTS OF REPEATED ARM MOVEMENTS ON PRESSURE PAIN SENSITIVITY IN NECK PAIN PATIENTS AND HEALTHY CONTROLS

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Background and aims: Chronic neck pain (CNP) is commonly found in the general population and have been linked to increased pressure pain sensitivity. This study investigated the effects of repeated arm movements on the pressure pain sensitivity in CNP patients and asymptomatic controls.

Methods: 25 CNP (16 insidious onset [IONP], 9 whiplash associated disorder [WAD]) and 25 healthy controls participated. Pressure pain thresholds (PPTs) were measured over three bilateral locations in the neck, head, and arm. Measurements were done at baseline and after three series of arm movements (6 different trials) in the scapular plane. Each movement series were separated by 8 min. A final assessment was done immediately after another three movement series separated by 35sec. Perceived pain was recorded on an electronic visual analogue scale (VAS).

Results: No significant difference in VAS scores were found between CNP groups while both were higher than controls during all movement trials ($P<0.001$). Both CNP groups displayed lower PPTs compared with controls for all measurements ($P<0.03$). At baseline for the neck site the WAD showed reduced PPTs compared with IONP ($P<0.05$). In controls increased PPTs was found post-movements for neck and head sites ($P<0.04$) while reduced PPTs was found at all sites in IONP ($P<0.03$).

Conclusions: Significant difference for both PPTs and VAS were found when comparing CNP with controls. Hypoalgesic effects were observed at two sites in controls while the opposite was the case for IONP. This may indicate the need for differentiated rehabilitation programs for different neck pain groups.

EFIC5-0511

A DELAYED ONSET MUSCLE SORENESS (DOMS) MODEL FOR THE EVALUATION OF TOPICAL ANALGESICS

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This delayed onset muscle soreness (DOMS) pilot study attempted to answer three questions, 1) does the method of insult provide sufficient baseline pain ($\geq$ 5 on NRS [0-10 scale]), 2) does the DOMS pain respond to topical analgesics, 3) which pain assessment (PI rest, PI motion or PR) was the most sensitive for measuring treatment effects? Normal healthy volunteers were asked to perform 100 preacher (bicep) curls utilizing 80% of their maximum tolerated weight. They were then asked to perform 50 additional curls. Subjects returned to the clinic after 2 days to determine if their baseline pain was sufficient to proceed with treatment. Subjects were assigned to receive either a topical diclofenac patch Q12 hours or no treatment. Subjects were then assessed over the next 48 hours inpatient period. Pain intensity (with motion or at rest) and pain relief were assessed. Twenty subjects were included with 13 qualifying for treatment assignment (10 active (A), 3 control (C)). Mean baseline PI scores were 5.8 at rest and 7.2 with motion across both treatment group. Endpoints are presented below:

Endpoints	Time Period
	0-48 hours
TOTPAR (A)	99.900
TOTPAR (C)	29.500
SPID Motion (A)	211.000
SPID Motion (C)	2.375
SPID Rest (A)	208.838
SPID Rest (C)	-7.583

Based on the data from this pilot study, we conclude the DOMS model using the preacher (bicep) curl insult does 1) provide sufficient baseline pain; 2) DOMS is treatable with a topical analgesic. All three assessments demonstrated efficacy however the pain intensity with motion produced the greatest baseline pain.

EFIC5-0565

OPIOID INDUCED HYPERALGESIA: IS IT CLINICALLY PREVALENT OR A RARE PHENOMENON? PRELIMINARY RESULTS OF A CANADIAN EXPERIENCE SURVEY

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Background and aims: Very little is known regarding the prevalence of Opioid Induced Hyperalgesia(OIH) therefore we undertook to evaluate the physician's) and chronic cancer pain(CCP) within their practice. We wish to identify the magnitude of this problem within current practice as well as garner knowledge regarding its identification and treatment.

Methods: After ethics approval an electronic questionnaire was distributed to physicians who work in anesthesiology, chronic pain and/or palliative care in Quebec. Results were compiled using the Survey Monkey software.

Results: three thousand questionnaires were sent and we have received 248 answers to date. Demographics show that 68% of respondents were men, 87% were anaesthesiologists, 50% had been working for 15 years or more and 65% worked in a university hospital setting. Of the 232 physicians who responded to the question, 164 (70%) said that they had "seen or suspected that a patient had developed opioid induced hyperalgesia". Overall, suspicion of OIH is low as shown in table 1. Most physicians (74.4%) did not use a clinical test to help make a diagnosis of OIH; the two main treatment modalities were NMDA antagonists (55.6%) and opioid rotation (50.3%).

Conclusions : OIH was not as prevalent as we had anticipated; more than half of physicians did not use a clinical test for the diagnosis of OIH; the treatments modalities most frequently used were the addition of an NMDA antagonist combined with lowering of opioid doses, and opioid rotation. Criteria for the diagnosis of OIH still need to be accurately defined.

EFIC5-0569

CHANGES IN PAIN CATASTROPHIZING PREDICT CHANGES IN PAIN INTENSITY AND PAIN INTERFERENCE IN PATIENTS WITH NEUROPATHIC PAIN: A CROSS-LAGGED PANEL ANALYSIS STUDY

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Background and aims: Catastrophizing is recognized as an important factor associated with negative outcomes in individuals with chronic pain. Longitudinal studies are needed to better understand the temporal relationship between these variables. The aim of this study was to examine the ability of early treatment-related changes in catastrophizing to predict later treatment-related changes in both pain intensity and pain interference (and vice versa).

Methods: 538 patients with neuropathic pain, documented by the *Douleur Neuropathique* 4 scale (DN4) from six multidisciplinary pain clinics across Canada from 2008-2011, completed (as part of a larger trial) validated measures of catastrophizing, pain intensity and pain interference at baseline, 3- and 6-months. Cross-lagged panel analyses were used to determine the temporal associations among these variables (Finkel, 2004).

Results: Unique cross-lagged relationships were found between early changes in catastrophizing and later changes in both pain intensity and pain interference ($p<.001$). The same pattern was found with early changes in both pain intensity and pain interference, prospectively accounting for unique variance in later changes in pain catastrophizing ($p<.001$).

Conclusions: This study demonstrated that changes in catastrophizing predict subsequent changes in both pain intensity and pain interference, consistent with the idea that catastrophizing plays a causal role in impacting these two outcome variables. These findings suggest a mechanism by which cognitive interventions designed to reduce catastrophizing contribute to improvements in both pain intensity and pain interference.

Acknowledgements: This research was funded by the Canadian Foundation for Innovation, Pfizer Canada and a bequest from the estate of Mrs. Beryl Ivey.

EFIC5-0603

COGNITIVE BEHAVIORAL TREATMENT IN PATIENTS WITH CHRONIC LOW BACK PAIN IN A PUBLIC HEALTH SETTING

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Background and aims: chronic low back pain (CLBP) is a syndrome characterized by musculoskeletal pain in the final segment of the spine (Casado-Morales, Moix-Queraltó and Vidal-Fernández, 2008). It is one of the most common chronic pain conditions given its prevalence, 7.7% (Humbría-Mendiola, Carmona, Peña-Sagredo and Ortiz, 2002). In addition to limitations in mobility (Indahl, 2004), CLBP has a negative impact on psychological well-being, provoking depression in 29% of patients (Mok and Lee, 2008). Psychological treatment has demonstrated to be effective in the improvement of quality of life of CLBP sufferers, especially applying Cognitive Behavioral Therapy (CBT) (Hoffman et al., 2007). The aim of this study is to describe a CBT protocol and present a case series of patients who already has been applied such treatment.

Method: 5 people with CLBP from the rehabilitation area of a public health hospital in Spain received 6 sessions of CBT, once a week, around 2 hours duration. The therapeutic components of this treatment were psychoeducation, mindfulness, cognitive reestructuting, programming activities, relaxation and relapse prevention. We evaluated patients at pre-test, post-test and at 3 and 6 months follow-up.

Results: a decrease of outcome measures (pain and disability) is observed after treatment.

Conclusions: This preliminary results indicate that it is possible to implement CBT in a public setting.

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EFIC5-0621

PAIN QUESTIONNAIRE: NEUROPATHIC PAIN OF ONCOLOGIC PATIENTS

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Introduction

Approximately 40% of oncologic patients with intermediate stages of the process and 60–87% of them with the disease generalization suffer from different degrees of pain syndrome. Herewith, 10-20% of patients suffer from intractable pains which can't be stopped using existing schemes recommended by WHO [1]. The amount of oncologic patients suffering from neuropathic pain ranges from 15 to 70 % [2].

Purpose

1. To study the structure of existing forms and questionnaires for the diagnosis of neuropathic pain;
2. To evaluate sensitivity and specificity of existing questionnaires;
3. To describe the possibility to use the existing questionnaires for diagnosis of neuropathic pain in oncologic patients;
4. To create a specific questionnaire to evaluate neuropathic pain in oncologic patients in the light of specific features of pathogenetic mechanisms of pain in cancer patients.

Methods

1.Advanced search of published data in databases RubMed, Elsevier, Embase, Scopus, AMED and Cinhal.
2.Methods of empirical investigation: comparison and material modeling.

Expected Results

1. Existing questionnaires to assess neuropathic pain without pathogenetic specificity in oncologic patients.

2. It is necessary to create a questionnaire to evaluate neuropathic pain in oncologic patients in the light of earlier pain medication usage, current and planned treatment, that will enable to improve the efficiency of pain control and improve the quality of patient's life.

Disclosure

1. The author has created the questionnaire to evaluate the neuropathic pain, which was adapted for oncologic patients. Intellectual property right was registered.
2. The specific questionnaire is currently being tested for sensitivity and specificity.

EFIC5-0677

ASSESSING USEFULNESS OF A 'SELF REPORTED OUTCOME MEASURE QUESTIONNAIRE' IN A UK UNIVERSITY HOSPITAL

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Aim and Background:

To analyze the usefulness of a novel 'self-reported outcome measure questionnaire' following interventional pain procedures.

Changes to the pain service delivery model in our hospital have resulted in difficulties in the follow up of patients after pain procedures. We devised a cost effective outcome measure questionnaire to enable follow up of these patients.

Method:

As shown in the figure, the devised tool is a simple measuring scale with a spider-chart design. It uses four linear scales (0 -10 points) to measure pain, sleep, activity level and mood. These 4 parameters were chosen as surrogate markers for quality of life (QOL).

Data was collected prospectively. The novel questionnaire was completed by the patient at the time of the intervention and

12 weeks after the procedure. After completion, the paper-based forms were returned by post. Findings from the first 65 responses were collated for this abstract.

Results:

42/65 patients reported improvement in QOL following pain clinic intervention; 17/65 did not experience any change and 6/65 reported reduction in the QOL after the intervention.

Discussion:

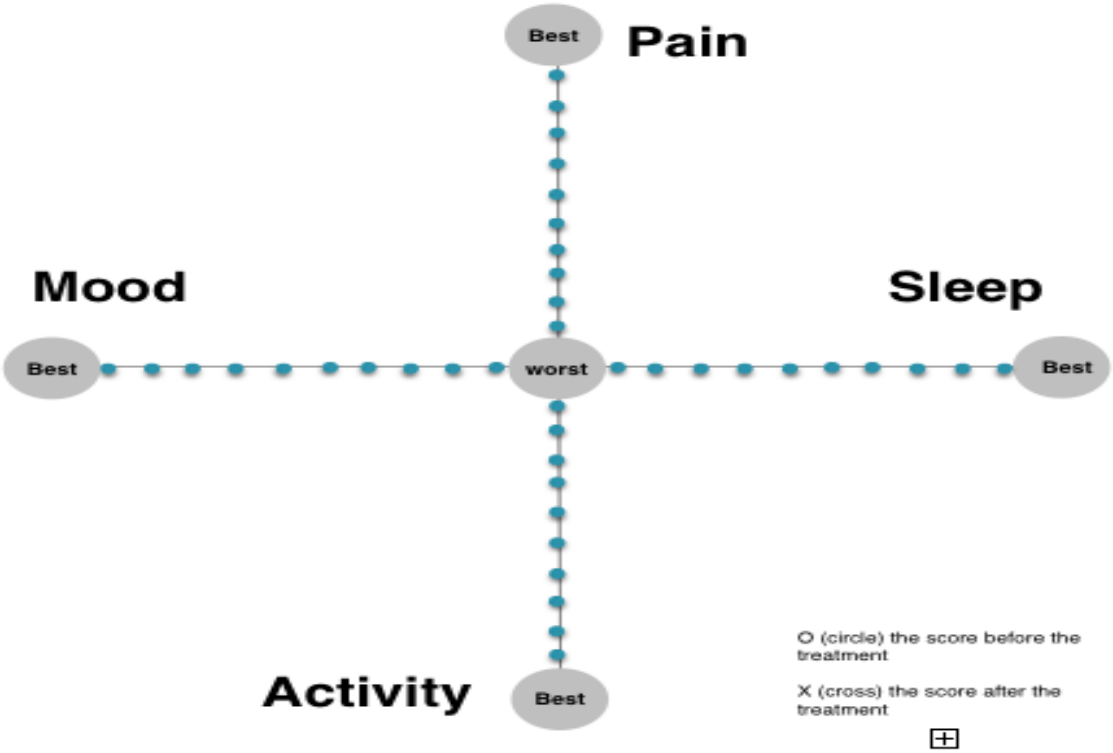
This measuring tool has enabled timely assessment of outcome following interventions and demonstrated effectiveness of our service. In addition, the simple formatting of the questionnaire has made it easy to assess improvements in quality of life helping in the planning for further care.

There are some limitations to this assessment tool. The methodology relies on patients' commitment, understanding and compliance for return of these questionnaires.

Pain outcome measure SB, UHCW

I.D. Male / Female Age Date

Diagnosis: Intervention



O (circle) the score before the treatment

X (cross) the score after the treatment

⊞

Comments:

Please mail to:
Outcome, Pain Service, Anaesthesia Dept., UHCW NHS Trust, Coventry CV2 2DX

EFIC5-0701

NOW YOU FEEL IT, NOW YOU DON'T: PAIN-RELATED MOVEMENTS ENHANCE SOMATOSENSORY PERCEPTION

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Background and aims: During movement, perception of somatosensory information on the moving body part is typically inhibited (i.e., sensory suppression) to allow adequate performance. We examined whether sensory suppression is attenuated when a movement is anticipated to induce pain. This is particularly relevant given the high prevalence of pain-related problems in physical activity and movement. We hypothesized that pain anticipation on the moving body part would enhance attention to that body location and thereby would reduce sensory suppression.

Methods: Undergraduate students (N=40) were instructed to move both arms either to the left or to the right, or keep them at rest, while simultaneously detecting a possible tactile stimulus on the left or right forearm. We manipulated pain anticipation by means of differential conditioning of the movements: One movement was occasionally followed by a painful stimulus on only the left or the right arm (threat). The other movement was never followed by pain (safe).

Results: A movement type (threat vs. safe) x target location (threatened vs. neutral arm) repeated measures ANOVA on the calculated sensory suppression indexes was conducted. We found that during the threat movement, there was indeed less sensory suppression on the pain than on the neutral location. No such effect was found during the safe movement.

Conclusions: The results suggest that pain anticipation during movement may result in enhanced processing of somatosensory input at the moving body part. The possible role of malfunctioning sensory suppression in pain-related movement impairment is discussed.

EFIC5-0702

POSTTRAUMATIC STRESS DISORDER AFTER HIGH-DOSE-RATE BRACHYTHERAPY FOR CERVICAL CANCER WITH TWO FRACTIONS IN ONE APPLICATION UNDER SPINAL/EPIDURAL ANESTHESIA: INCIDENCE AND RISK FACTORS

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Background and aims

To investigate the psychological consequences of high-dose-rate brachytherapy with 2 fractions in 1 application under spinal/epidural anesthesia in the treatment of locally advanced cervical cancer.

Methods

In 50 patients with locally advanced cervical cancer, validated questionnaires were used for prospective assessment of acute and posttraumatic stress disorder (ASD/PTSD) (Impact of Event Scale-Revision), anxiety/depression (Hospital Anxiety and Depression Scale), quality of life (European Organization for Research and Treatment of Cancer Quality of Life Questionnaire Core 30/Cervical Cancer 24), physical functioning (World Health Organization performance status), and pain (visual analogue scale), before and during treatment and 1 week and 3 months after treatment. Qualitative interviews were recorded in open format for content analysis.

Results:

Symptoms of ASD occurred in 30% of patients 1 week after treatment; and of PTSD in 41% 3 months after treatment in association with this brachytherapy procedure. Pretreatment predictive variables explain 82% of the variance of PTSD symptoms. Helpful experiences were the support of the treatment team, psychological support, and a positive attitude. Stressful factors were pain, organizational problems during treatment, and immobility between brachytherapy fractions.

Conclusions

The specific brachytherapy procedure, as performed in the investigated setting, bears a considerable risk of traumatization. The source of stress seems to be not the brachytherapy application itself but the maintenance of the applicator under epidural anesthesia in the time between fractions. Patients at risk may be identified before treatment, to offer targeted psycho-social support. The reported stressful factors serve as a basis for improvement of patient management.

EFIC5-0721

THE EFFECT OF A SHORT MINDFULNESS INTERVENTION ON EXERCISE INDUCED HYPERALGESIA IN FIBROMYALGIA PATIENTS: A RANDOMIZED CONTROLLED TRIAL

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Background and aims

Previous research demonstrated that exercise can induce hyperalgesia in patients diagnosed with fibromyalgia (FM). The goal of the present study was to evaluate whether a short intervention of Mindfulness (MF) is able to dampen exercise induced hyperalgesia (EIH) in patients with fibromyalgia.

Methods

At intake female FM patients were randomly allocated to the intervention group (IG) (n = 13) or a control (n = 8) group (CG). During week 1 baseline measurements were assessed, being pain parameters and EIH (NRS, pin prick allodynia, manual algometry, cuff algometry before and after and the six minute walking test). In week 2, the IG received three sessions of MF (3h) and the CG received no intervention. In the third week baseline measurements were repeated.

Results

There were no significant time or interaction effects for the pain parameters and EIH ($p>0,05$). The only significant interaction found, was the walking distance that increased in the IG and stayed constant in the CG (P time*group: 0,045).

Conclusions

The present study showed that a short MF intervention has a statistically significant influence on functionality, but not on pain and EIH. Given the small sample sizes results should be interpreted with caution, and larger trials are necessary. Nevertheless, even a short MF session seems to improve functionality, independent from pain measurements.

EFIC5-0735

PROLONGED-RELEASE OXYCODONE/NALOXONE (OXN PR) FOR SEVERE PARKINSON'S DISEASE (PD)-RELATED PAIN: OUTCOMES FROM A DOUBLE-BLIND, RANDOMISED, PLACEBO-CONTROLLED STUDY

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Background and aims

OXN PR provides equivalent analgesic efficacy and improved bowel function versus oxycodone PR for many types of moderate-to-severe chronic pain. A randomised, double-blind study investigated OXN PR vs placebo for severe PD-related pain.

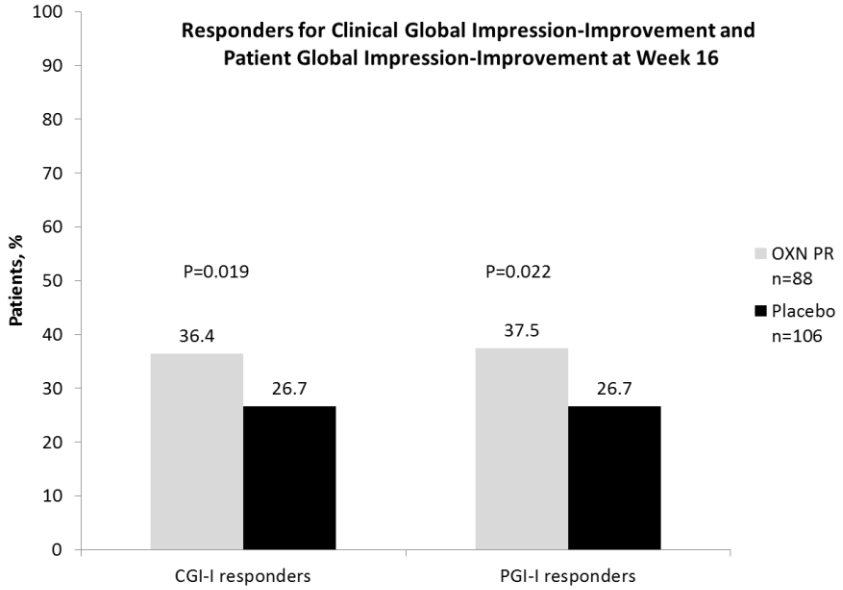
Methods

Patients with PD (Hoehn & Yahr Stage II–IV), severe pain in ≥1 section of King's PD Pain Scale and average 24-h pain score ≥6 (11-point scale: 0 'no pain' to 10 'worst pain imaginable) were randomised to OXN PR (N=93; titrated to ≤20/10 mg bid) or placebo (N=109) for 16 weeks. Primary endpoint was average 24-h pain score (Week 16, Full Analysis Population [FAP]). Secondary endpoints included assessment of illness improvement/worsening vs baseline using Clinical Global Impression-Improvement (CGI-I) and Patient Global impression-Improvement (PGI-I) scales, and safety.

Results

Mean 24-h pain was numerically improved with OXN PR vs placebo at Week 16 in the FAP (least squares mean difference [95% CI] -0.6 [-1.26, 0.02] points, p=0.058) and significantly improved in the per protocol population (PPP; -0.9 [-1.52, -0.21], p=0.010). Responder ('Much improved' or 'Very much improved') rates were significantly higher with OXN PR vs placebo: odds ratio (95% CI) for CGI-I: 1.6 (1.08, 2.37), p=0.019 and PGI-I: 1.6 (1.07, 2.49), p=0.022; Figure. Incidence of adverse events (65.2% vs 69.7%) was

similar for OXN PR vs placebo.



Response was assessed on a 7-point scale ('very much improved', 'much improved' 'minimally improved' 'no change' 'minimally worse', 'much worse', 'very much worse')
Responders: 'Much improved' or 'Very much improved'

Conclusion

While the primary endpoint of this study was not met statistically at Week 16 in the FAP, analysis in the PPP and secondary endpoint data support the utility of OXN PR for severe PD-related pain.

Sponsor:Mundipharma Research

EFIC5-0800

ADAPTING THE WHO SURGICAL SAFETY CHECK LIST TO INTERVENTIONAL PAIN MEDICINE

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Background and Aims:

Repeated mishaps on interventional lists.
Root causes were human, not technical factors.

Examples:
Nerve block – wrong side. Mistake noticed, block repeated correct side. Staff missed error, patient had noticed wrong side, but not said anything.

Facet joint block, needle placed with some difficulty. Patient confirmed it was in right spot. Physician forgot to inject and removed needle. Nurse noticed mistake, did not dare to tell in presence of awake patient.

Methods:

We adapted the WHO surgical check list:

Team Brief:

Before start of treatment list

Team (physician, nurses, auxiliaries, radiographer) assembles.
New members introduced to team.
Review of planned procedures
Issues and problems, equipment required ...
Then send for patients
Time Out:

- Patient on treatment table
- Check of patient identity, allergy status,
- Intended procedure, left/right?

Debrief:

- End of list,
- What went well ?
- Do anything differently?

Results:

Introducing new procedures, breaking down traditional barriers, reducing authority distance, is culturally challenging in Yorkshire.

Since introduction, ZERO laterality errors.

Junior staff speak up:

Auxiliary sees physician accidentally contaminating sterile glove.

She speaks up. Consultant: “Thank you. Fresh gloves, please”
This may prevent a paraspinal abscess.

Debriefing did not work, people recover patients, go home, start clinics ...

Staff members feel positive about these changes, more valued.

Introduction of the WHO checklist:

- cost-neutral,
- reduced mishaps/complaints
- increased efficiency of lists.

Conclusions

An adapted WHO check list reduced non-technical error and increased staff satisfaction.

EFIC5-0830

TRAIN-THE-TRAINER APPROACH FOR TEACHING ABOUT MANAGEMENT OF PAIN IN LOW RESOURCE COUNTRIES: WILL THIS LEAD TO SUSTAINABLE EDUCATION?

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Background and aims

Pain management is lacking in low resource countries. Reasons, amongst others, are limited resources for teaching and treatment and lack of awareness about pain. EFIC's Educational Committee, IASP's Developing Countries Working Group and NeupSIG, encourage ongoing education and efforts to raise awareness. One initiative is the 'Pain Schools in Low Resource Settings", aimed to empower local champions with knowledge in pain, so they can establish local pain schools with minimal ongoing input from external experts. The trainees become trainers in their country (=Train-the-Trainer, TtT).

Methods

International experts prepared and reviewed 12 talks about pain management. The talks are used to train the trainers in one-day workshops and as handouts for providers attending the lectures. Trainers are encouraged to adapt the talks to local conditions; they can translate them into the native language. We assessed short- and long term aims of the TtT concept: (1) could the talks be used for teaching healthcare professionals with no/little previous experience in pain; (2) would trainees give at least four talks during the year following the workshop.

Results

Four test workshops were carried out in Albania, Kenya, Serbia, Kosovo. In each, 10 – 12 physicians were trained; they gave the talks to their colleagues. Preliminary findings indicate that trainers were able to give 1-2 talks per year.

Healthcare provides will be able to set up new local schools by accessing the talks through the project's website.

Conclusions

We hope that the TtT strategy will be sustainable and facilitate improved pain management where employed.

EFIC5-0907

ARE FEMALE MICE MORE SUSCEPTIBLE TO CRPS-LIKE CHANGES AFTER BONE FRACTURE THAN MALES?

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The prevalence of the neurological disease Complex Regional Pain Syndrome (CRPS), which can occur after bone fracture, is higher in female patients. Mimicking CRPS in mice, a tibial fracture model has been developed but most studies are conducted in male mice. We compared male with female animals in their behavioral and electrophysiological outcome after tibial fracture and followed them over six months. Females differed in exaggeration of the posttraumatic inflammationand and spinal reorganization after bone fracture. Receptive fields in the spinal cord were enlarged after the trauma in males and females however they recovered only in male mice, not females. Thus gender specific mechanisms might impact on the vulnerabilityof develop a CRPS in humans as well as in mice.

EFIC5-0930

SYMPTOMS CONCERNING PERSONS SUFFERING FROM CHRONIC PAIN OF CERVICAL AND THORACIC SEGMENT OF SPINE CONTRA SELECTED CHARACTERISTICS OF PERSONALITY

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Introduction

Failing to notice the individual differences and the role of psychological factors lowers the effects of pain treatment.The aim of the research was to access the relations existing between the characteristics of patients' personality and the intensity of depressive symptoms, the intensity of fear and automatic negative thoughts, observed in a group of patients suffering from chronic pain.

Method

Thus, the research programme was concentrated on creating such regressive models that cover the examined variables and allow us to find out which hypothetical independent psychological variables (elucidating) cause regular changes of dependent variables (being elucidated) i.e. symptoms of depression.93 patients of the Pain Therapy Outpatients' Clinic participated in the tests, having previously expressed their conscious agreement.The information from the semi-structural history,NEO-FFI,one part of the Inventory of State and Feature of Fear Scale by C.Spielberger, Strelau, Tysarczyk, Wrześniewski) conducted at the Pain Therapy Outpatients' Clinic accomplished the picture of chronic pain of cervical and thoracic segment of spine, concerning the examined patients.

Results

Due to the application of the cluster analysis method, two clusters of persons highly different from each other were observed. The dimensions that best differentiate the examined group consisting of persons suffering from chronic pain were distinguished.

Conclusion

The relations recognized in the tests reveal that, in case of the examined patients' general feeling, there are certain features typical for emotional and cognitive disorders. Moreover, they influence one another, creating the system, the main effect of which is powerlessness towards own ailments.The research is being continued.

EFIC5-0936

KNOWLEDGE OF NURSES ON CANCER PAIN IN AN INPATIENT UNIT

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Introduction: In pain management evaluation of nurses is paramount, a call prioritized valuing the complaints, identifying pain in physical, psychological, social and spiritual aspects, seeking methods for assessment and care planning to succeed in pain management.

Objective: To evaluate the knowledge of nurses concerning the management of pain in cancer patients in an inpatient unit.

Methodology: Quantitative research by applying a questionnaire to 20 nurses in an inpatient unit in Brazil on pain management in cancer patients.

Results: The majority of nurses were male, mean age 45 years, with five years the average graduation time. As to the knowledge of nurses, 70% said they know the difference between acute pain and chronic pain, and 45% know as pain assessment instrument the numerical verbal scale (EVN), analog (EVA) and faces, 35% only EVN and faces and yet, only 20% know the EVN. As for the time of reassessment of the patient after relief measure, the majority (80%) made new assessment in 1 hour and finally, when asked about the adverse effects of opioids know 95% and only 5% could not relate.

Conclusion: The nurse plays an important role in the management process of the pain of cancer patients. It is very important to have professional scientific field on pain, impact and how to manage properly, so we can give the patient a safe and effective treatment.

EFIC5-0947

EPIDURAL PULSED RADIOFREQUENCY (EPRF) STIMULATION FOR THE TREATMENT OF PAIN SYNDROMES - A RETROSPECTIVE ANALYSIS

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In 2003, the called multifunctional electrode® , a steerable, flexible electrode, which delivers the PRF pulses parallel to the medullary fibers or nerval axons epi- durally (ePRF), has been introduced first in Germany. Furthermore, the catheter enables the injection of medications or agents into the epidural space instead of, or in combination with, the electrical current.
There remains a strong discrepancy between the widespread use of the ePRF® on one hand, and a significant lack of systematic studies on the other hand.
The aim of our retrospective study was, to analyze the application and the use of ePRF in our centers with regard to which pain indications were treated, how the ePRF method was applied, and to estimate the efficacy and the risk profile of the treatment. Especially, we wanted to focus on the amount of the therapeutic effect, which is only due to the electrical impulse, alone. We also wanted to work out the patients satisfaction with ePRF treatment and therefore we wanted to look beyond the simple VAS scores.

This study was a multicenter retrospective review of consecutive patients treated with ePRF using the multifunctional electrode® at the Centre Hospitalier Luxem- burg (CHL), Luxemburg; the Orthopädische Klinik (OS), Schwerte, Germany; and the Interdisziplinäres Wirbelsaeulenzentrum, Bonn (IWIZ), Germany

EFIC5-0982

THE ROLE OF BEHAVIORAL AND SOCIAL FACTORS IN THE RELATIONSHIP BETWEEN PAIN CATASTROPHIZING AND PAIN INTENSITY: A MODERATED MEDIATION MODEL

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Background. The literature suggests an association between pain catastrophizing and pain intensity. The current study hypothesized that pain behaviors can mediate this association. Moreover, expressing pain behaviors can elicit caregivers' responses. Therefore, the association between pain behaviors and pain intensity may depend on caregivers' responses. Furthermore, we explored the effect of caregivers' responses on patients' pain intensity based on both patients' perception of caregivers' responses and caregivers' reports.

Methods. The sample consisted of 154 chronic pain patients and their family caregivers. Patients completed questionnaires about pain catastrophizing, pain intensity, pain behaviors and their perception about caregivers' responses. Caregivers completed a questionnaire about responding to patients' pain. To investigate the hypotheses, a simple mediation and several moderated mediation analyses were conducted.

Findings. Pain catastrophizing was associated with pain intensity ($r = .36$). Pain behaviors mediated this association ($p = .02$). Other findings indicated that the association between pain behaviors an pain intensity was only significant if patients reported high levels of caregivers' solicitous (CI [.20, .78]) and high levels of caregivers' distracting responses (CI [.29, .89]) and if caregivers' reported high levels of solicitous responses (CI [.22, .88]).

Discussion. Results indicated that the relationship between pain catastrophizing and pain intensity was mediated by pain behaviors. Moreover, caregivers' responses to patients' pain behaviors had influence on the link between pain behaviors and the report of pain intensity. Meaning that patients who show more pain behaviors perceive more intensive pain when caregivers only if caregivers show supportive responses.

EFIC5-0986

COMPARISON OF PONV PROPHYLAXIS WITH PALONOSTRON OR DEXAMETHASONE AND PALONOSETRON-DEXAMETHASONE COMBINATION

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Introduction

Next to pain post-operative nausea & vomiting (PONV) is the single most distressing symptom after surgery. PONV is a very unpleasant symptom which affects smooth emergence from anaesthesia and greatly reduces patient satisfaction in the post-operative period. Laparascopic cholecystectomy has a high incidence of PONV.

Objectives

The presented study compares the efficacy of palonosetron-dexamethasone combination with each drug alone for prophylaxis of PONV after laparoscopic cholecystectomy performed under general anaesthesia (GA).

Methods

After institutional ethical clearance and written informed consent from patient 180 ASA Grade I & II patients aged 18-75 yr of either sex were enrolled in this prospective, randomized, double-blind trial to receive one of the three treatments: palonosetron 75 mcg (Group P; dexamethasone 8 mg (Group D); or palonosetron 75 mcg + deamethasone 8mg (Group PD). Standardized balanced anaesthesia technique was used in all patients. Perioperative pain management was as per the institutional protocol. Primary outcome was zzincidence of PONV in the three study groups whereas postoperative shivering, sedation and pain were the other outcome.

Results

Incidence of PONV after laparoscopic cholecystectomy in the 1st 24 hr post surgery was 23.4%, 27.2% & 56.14% in groups PD, P and D respectively. Incidence of PONV in groups PD and P were lower than in group D (Statistical significance $P < 0.05$). However, difference in PONV incidence between groups PD and P were not statistically significant ($P > 0.05$).

Conclusion

Palonosetron and palonosetron-dexamethasone combination were better than dexamethasone alone for preventing PONV in patients of laparoscopic cholecystectomy.

EFIC5-1015

MORPHINE PUMP IMPLANTATION IN THIGH. CASE REPORT

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Implantation of a morphine pump in a thigh. Surgical Technique, complications and reasons. A typical placing is not ever possible.

EFIC5-1040

DETERMINE OF USED PAIN RATING SCALES IN NEUROSURGERY CLINICS: A SHORT REVIEW

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Background and aims: Pain is one of the most common symptoms in neurosurgical diseases (1,2). Measurement and evaluation of pain is very important in the relief of patients with pain (3,4). This review aim to determine the most used pain assessment tools in neurosurgery clinics.

Methods: When literature examined, there are various assessment pain assessment tool for measure pain in the neurosurgical intensive care unit and clinics; numerical rating scales (NRS), visual analogue scales (VAS) nonverbal pain scale (NVPS), McGill Pain Questionnaire (MPQ), Wheelchair User's Shoulder Pain Index (WUSPI), the Critical-Care Pain Observation Tool (CPOT), Behavioral Pain Scale (BPS), Critical-Care Pain Observation Tool (CPOT) (5-11).

Results: Scales provide information about characterıstıcs of pain. Especially, pain routinely is monitored in intensive care units (12). Visual analogue scale (VAS) or numeric rating scale (NRS) can use to assess pain intensity. The Behavioral Pain Scale (BPS) and the Critical-Care Pain Observation Tool (CPOT) are the most valid and reliable behavioral pain scales (13).

Conclusions: Pain is individual (14). Considering the individual differences, appropriate assessment tools should be used. In neurosurgical patients, validity and reliability scales should be used.