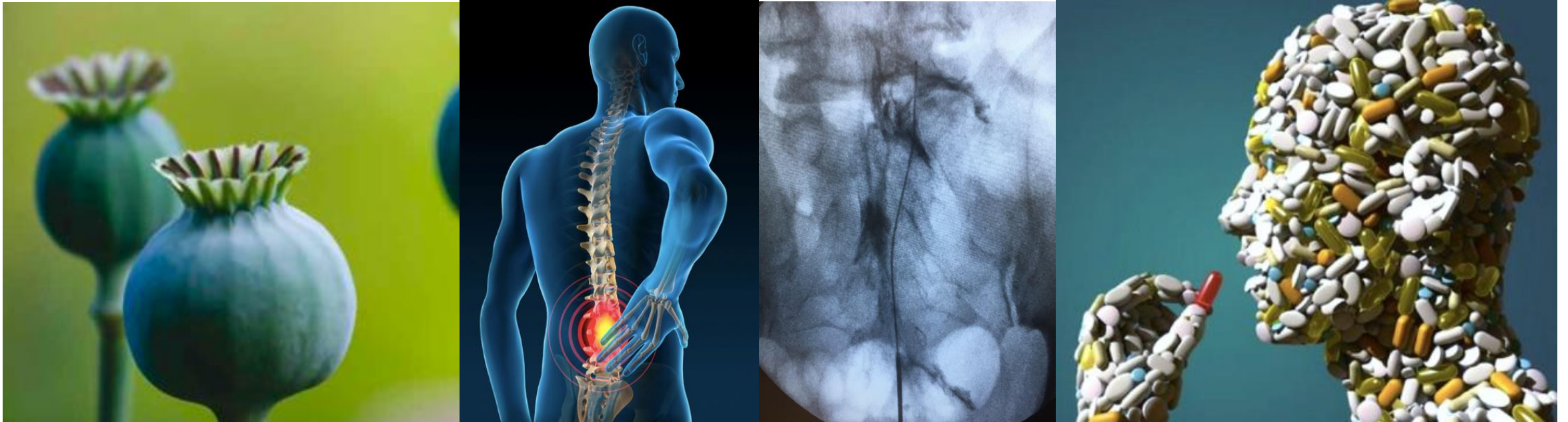


Managing chronic pain in sickle patients – a pain physician's perspective



Dr Fauzia Hasnie

Consultant Lead, Opioid Multidisciplinary Pain Management Clinic
Joint Lead, Combined Sickle-Opioid Virtual Multidisciplinary Clinic
Guy's & St Thomas' NHS Foundation Trust



Guy's and St Thomas'
NHS Foundation Trust

22nd November 2023



UKFHD 56th Academic Meeting

Outline

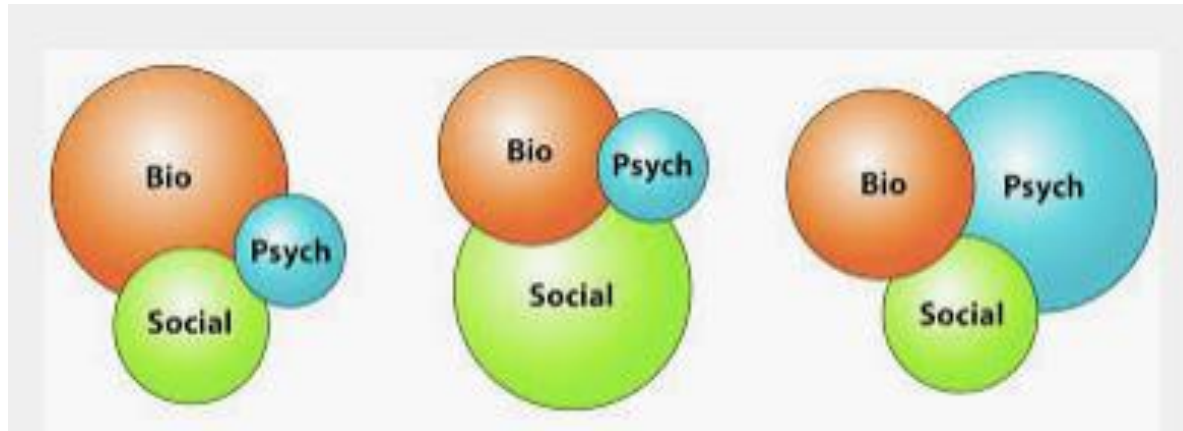
- Chronic pain
- Principles of management in chronic pain
- Practical approach to outpatient management of chronic pain in SCD
- Outpatient opioid management
- Considerations in opioid weaning

Chronic (Persistent) Pain

- >3 Months
- Persists beyond injury and outlasts any potential for healing.
- Maladaptive and negatively impacts on individual & society (significant disability; depression; adverse social consequences).
- Emergence of chronic pain occurs with increasing age.
- 30-40% of adolescents and adults living with SCD suffer from chronic pain.
- SCD chronic pain is multifactorial.
- Mechanisms in persistent pain: nociceptive; neuropathic; nociplastic (coexist in SCD).

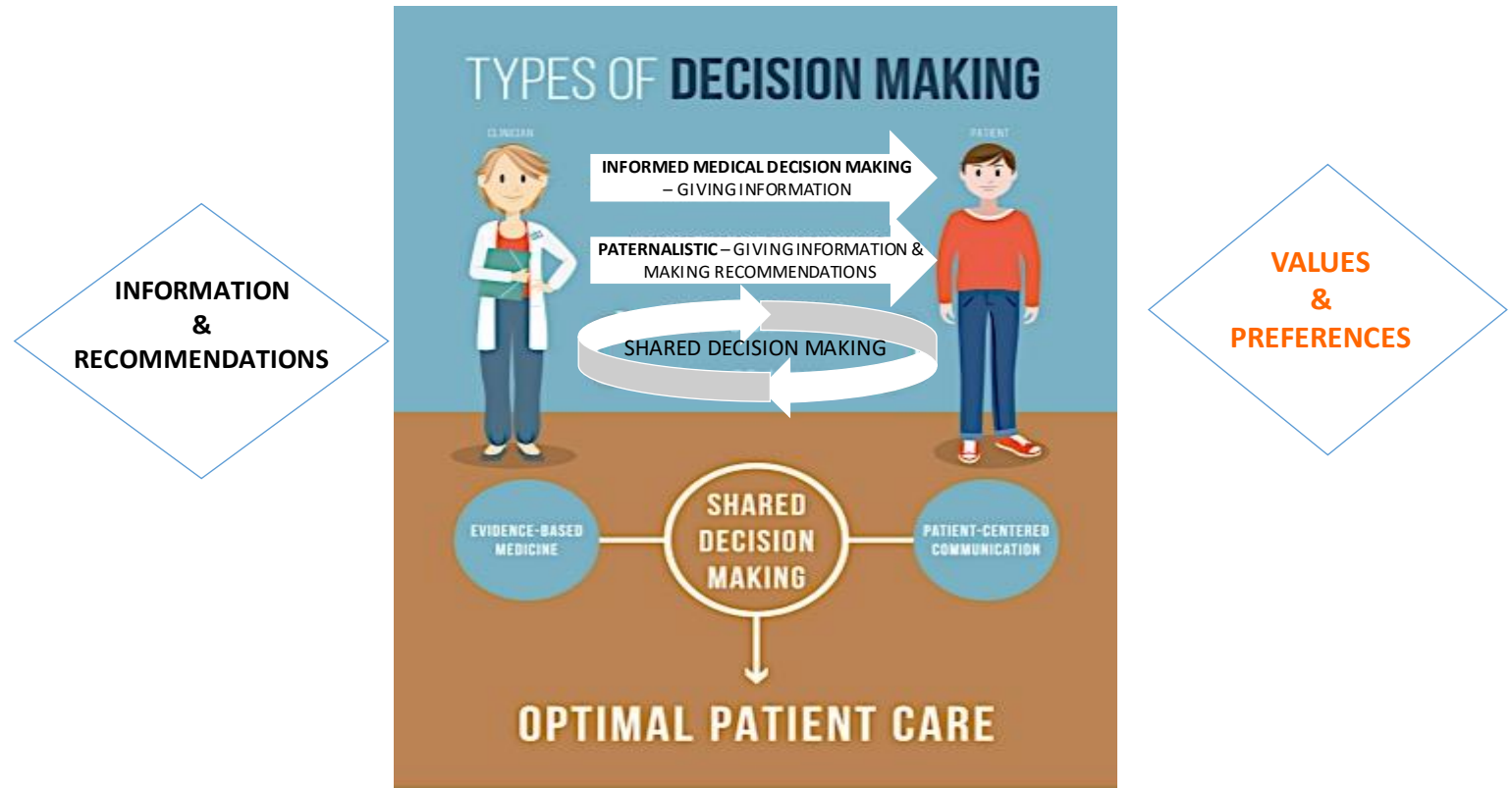
Principles of Management in Chronic Pain (I)

- **Patient-centred approach and individualised care** – matched to patient's needs; understand how pain is affecting their life and vice versa; what is important to them (psychosocial influences).
- **Biopsychosocial model** – socioeconomic background, social supports, culture/traditions, faith, attitudes, beliefs, coping skills, learning and memory from previous experiences/past trauma (related or unrelated), personality etc.



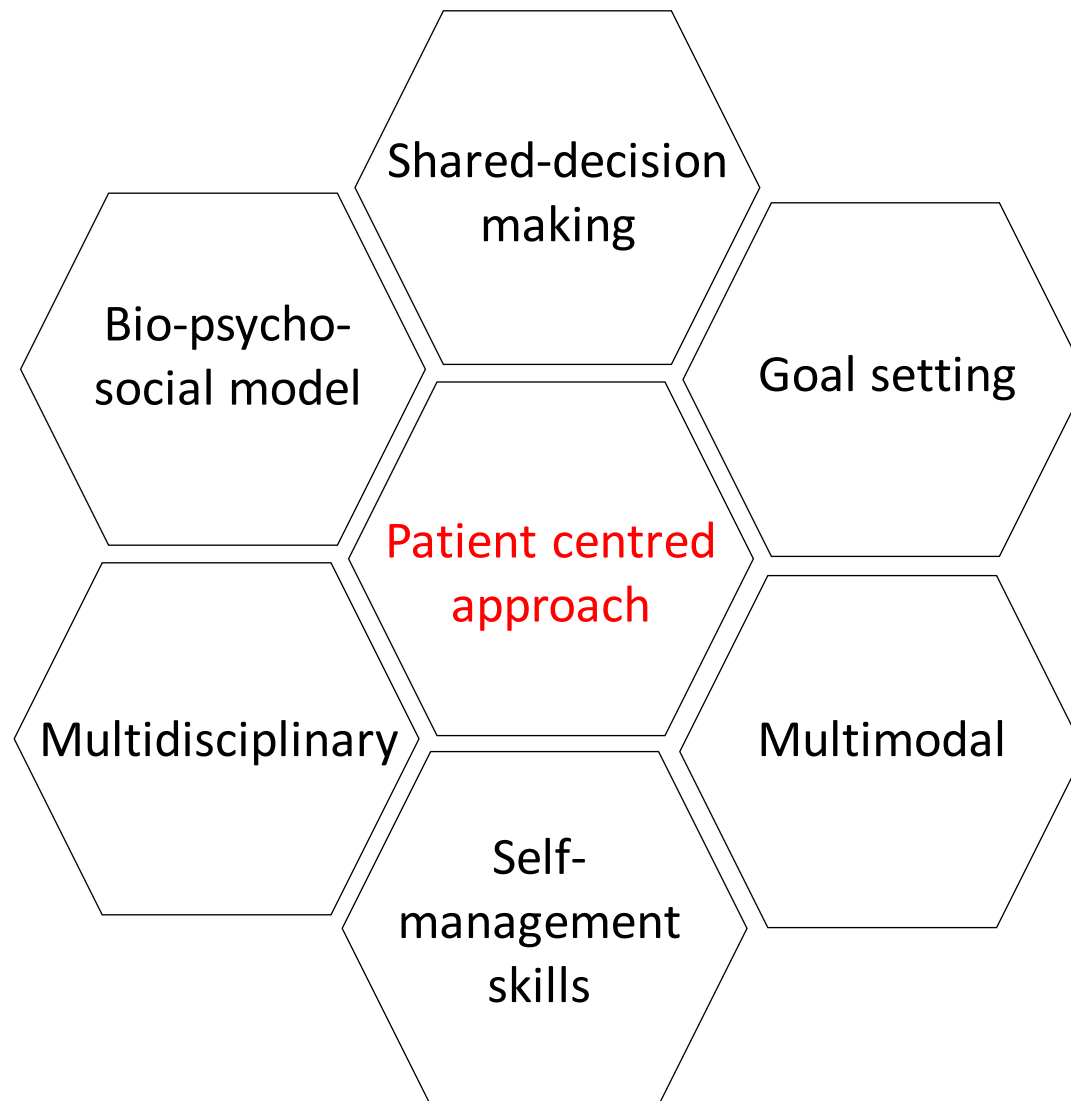
Principles of Management in Chronic Pain (II)

- **Shared-decision making**
 - increased patient knowledge and satisfaction
 - greater involvement in their own care
 - more realistic patient expectations
 - improved patient compliance to treatment plan
 - reduced decisional conflict and anxiety
 - improved doctor-patient relationship
 - better health outcomes



Principles of Management in Chronic Pain (III)

- **Multidisciplinary/specialty** - collaborative
- **Multimodal** – pain is complex (biopsychosocial model)
- **Goal setting** - emphasis on function
- Empower **self-management**



Practical Approach to Outpatient Management of Chronic Pain in SCD



Practical Approach to Outpatient Management of Chronic Pain in SCD



American Society of Hematology 2020 guidelines for sickle cell disease: management of acute and chronic pain

Amanda M. Brandow,¹ C. Patrick Carroll,² Susan Creary,³ Ronisha Edwards-Elliott,⁴ Jeffrey Glassberg,⁵ Robert W. Hurley,^{6,7} Abdullah Kutlar,⁸ Mohamed Seisa,⁹ Jennifer Stinson,¹⁰ John J. Strouse,^{11,12} Fouza Yusuf,¹³ William Zempsky,¹⁴ and Eddy Lang¹⁵

¹Section of Hematology/Oncology/Bone Marrow Transplantation, Department of Pediatrics, Medical College of Wisconsin, Milwaukee, WI; ²Department of Psychiatry and Behavioral Sciences, Johns Hopkins School of Medicine, Baltimore, MD; ³Center for Innovation in Pediatric Practice, Division of Hematology, Oncology and Bone Marrow Transplant, Nationwide Children's Hospital, The Ohio State University School of Medicine, Columbus, OH; ⁴Department of Pediatrics, University of Illinois at Chicago, Chicago, IL; ⁵Department of Emergency Medicine, Icahn School of Medicine at Mount Sinai, New York, NY; ⁶Department of Anesthesiology and ⁷Department of Public Health Sciences, Wake Forest School of Medicine, Winston Salem, NC; ⁸Center for Blood Disorders, Medical College of Georgia, Augusta University, Augusta, GA; ⁹Mayo Clinic Evidence-based Practice Research Program, Robert D. and Patricia E. Kern Center for the Science of Health Care Delivery, Division of Health Care Policy and Research, Department of Health Sciences Research, Mayo Clinic, Rochester, MN; ¹⁰Child Health Evaluative Sciences, Research Institute, The Hospital for Sick Children, Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, Toronto, ON, Canada; ¹¹Division of Hematology, Department of Medicine, and ¹²Division of Pediatric Hematology/Oncology, Department of Pediatrics, Duke University School of Medicine, Durham, NC; ¹³Department of Pediatrics, Medical College of Wisconsin, Milwaukee, WI; ¹⁴Division of Pain and Palliative Medicine, Connecticut Children's Medical Center, Department of Pediatrics, University of Connecticut School of Medicine, Hartford, CT; and ¹⁵Department of Emergency Medicine, Cumming School of Medicine, University of Calgary, Calgary, AB, Canada

Background: The management of acute and chronic pain for individuals living with sickle cell disease (SCD) is a clinical challenge. This reflects the paucity of clinical SCD pain research and limited understanding of the complex biological differences between acute and chronic pain. These issues collectively create barriers to effective, targeted interventions. Optimal pain management requires interdisciplinary care.

Objective: These evidence-based guidelines developed by the American Society of Hematology (ASH) are intended to support patients, clinicians, and other health care professionals in pain management decisions for children and adults with SCD.

American management

Amanda M. Braxton,
Abdullah Kutlar,¹

¹Section of Hematology
Behavioral Sciences
Transplant, Nationwide
IL; ⁵Department of E
Wake Forest School
Practice Research P
Sciences Research,
Nursing, University of
Pediatrics, Duke Uni
Medicine, Connectic
Medicine, Cumming

18 Recommendations specific to acute and chronic pain.
Low certainty evidence (extrapolated from OA/FM studies) for:

- + NSAIDs
- + Duloxetine (SNRI)
- + TCA
- + Gabapentinoids
- + CBT
- + Other integrative approaches (massage/ acupuncture)

Overall recommend
against COT

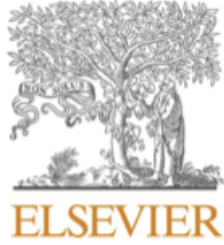
disease:

y,^{6,7}
Lang¹⁵

Psychiatry and
Bone Marrow
Chicago, Chicago,
Health Sciences,
Evidence-based
Department of Health
Sternberg Faculty of
Department of
and Palliative
of Emergency

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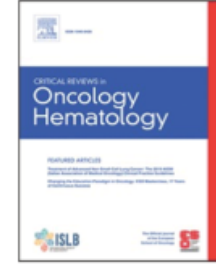
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Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Critical Reviews in Oncology / Hematology

journal homepage: www.elsevier.com/locate/critrevonc



Chronic pain management in sickle cell disease: A systematic scoping review of controlled trials

David Sidhom^{a,1}, Deena Aboul-Hassan^a, Daniel J. Clauw^{a,2}, Cherie Cofield^b,
Rachel Bergmans^{a,*,3}

^a Department of Anesthesiology, University of Michigan, Ann Arbor, MI, USA

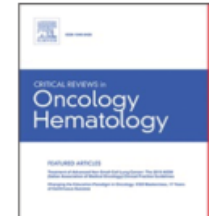
^b School of Nursing, University of Michigan, Ann Arbor, MI, USA



Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Critical Reviews in Oncology / Hematology

jou



Comparison of two **VIT D SUPPLEMENTATION** strategies in children (n=38)
=> no difference in MSK pain or QOL

Chronic pain management in sickle cell disease: A systematic scoping

updates

INHALED CANNABIS, patients also on long-term opioids (n=23)
=> no difference in pain

Cofield^b,

^a Department of Anesthesiology, University of Michigan, Ann Arbor, MI, USA

^b School of Nursing, University of Michigan, Ann Arbor, MI, USA

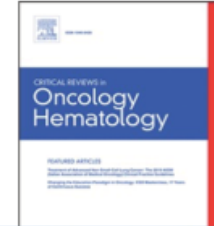
HYPNOSIS 30 min session (n=14)
=> no difference in pain

MULTIMEDIA EDUCATION PROGRAMME (n=228)
=> no difference in pain



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Critical Reviews in Oncology / Hematology



HYDROTHERAPY/ PHYSIOTHERAPY (n=10) => IMPROVEMENT IN HIP/LBP

Chronic pain management in sickle cell disease: A systematic scoping

review

MINDFULNESS (n=34) => DECREASE in PAIN CATASTROPHISING

Da

Ra

^a Department of Anesthesiology, University of Michigan, Ann Arbor, MI, USA

^b School of Nursing, University of Michigan, Ann Arbor, MI, USA

CBT (single session + homework for 8/52) (n=23) => USE OF CBT SKILLS ON DAYS WITH HIGHER PAIN LED TO REDUCTION IN NEXT DAY PAIN INTENSITY

Treating Chronic Pain in Sickle Cell Disease — The Need for a Biopsychosocial Model

Janet E. Childerhose, Ph.D., Robert M. Cronin, M.D., Maryanna D. Klatt, Ph.D., and Andrew Schamess, M.D.

Chronic pain is the most common complication affecting adults with sickle cell disease (SCD).¹ Pain profoundly affects people's quality of life, functional ability, and health care utilization. Clinicians are often unsuccessful at addressing chronic pain in SCD, especially among the large number of patients for whom nonopioid analgesics aren't sufficient and those who have developed opioid tolerance. Why aren't we doing better?

We believe the medical community is looking at sickle cell pain through the wrong lens — treating it as a hematologic problem, while overlooking the neurologic, psychological, and social aspects of chronic pain. Given the current understanding of the neuropsychology of pain, the health care system has the ability to manage sickle cell pain more effectively. Doing so will require accepting a broader understanding of the experience of pain and

devoting adequate resources to addressing its multiple dimensions.

The biopsychosocial model helps capture people's experience of chronic pain by affirming that biologic, neuropsychological, and socioenvironmental elements play a role in pain-related processes. Biologically, acute vaso-occlusive events in SCD cause tissue inflammation and nociceptive pain. This concept remains the primary model used in clinical prac-

Practical Approach to Outpatient Management of Chronic Pain in SCD



Practical Approach to Outpatient Management of Chronic Pain in SCD (I)

- **Doctor-patient relationship**
- **Expectation** management – explore patient's expectation of visit; 'useful/meaningful' pain relief rather than cure; expectation of outcomes from interventions, drug therapy etc; expectation that passive rather than active treatment will be beneficial (yellow flags)
- **Education** and empower.
- 'Back to basics' approach underlies pain management (healthy diet, healthy lifestyle).
- Importance of **movement/ physical therapies** (e.g. group exercise programme especially combined with conventional medical management) - aim is to reduce deconditioning, functional impairment and maladaptive behaviour; to desensitise and break fear-avoidance cycle; avoid boom-bust cycle (pacing); and to reactivate.
- **Psychological therapies** - individual/PMP/(inpatient) – based on ACT.

Practical Approach to Outpatient Management of Chronic Pain in SCD (II)

- **Pharmacological**
- Represents small part of overall pain management and is the least changeable option
- Potential drug interactions/risk multipliers
- Mechanism-based approach...practical pain management is often limited by tolerability
- Other issues with tolerance, dependence, misuse, addiction.
- Aim to **rationalise, optimise & educate.**



Practical Approach to Outpatient Management of Chronic Pain in SCD (III)

- **Interventions** (e.g. targeted injections)

- rationale, benefit & risks
- predictors of poor outcome
 - yellow flags
 - widespread pain
 - no clear target
 - no correlation clinically and radiologically
 - pain behaviours
 - high anxiety/psychologically vulnerable/ unstable mental health
 - high dose opioids (OIH)/ drug dependency
 - ongoing litigation
 - if patient is undecided

- **Alternative** – acupuncture, TENS



Principles of Outpatient Opioid Management in SCD Opioid Trial/ COT



- Weigh up risk: benefit
- Risk of aberrant medication-related behaviour & yellow flags (risk factors for opioid misuse)
- Risk of long-term side-effects
- Implications of tolerance and dependence
- Alternatives/ adjuncts: non-opioid; non-pharmacological
- Lowest effective dose
- Risk of harm with no added benefit (>120mg OME) & caution with risk multipliers
- Tolerability – managing common side-effects (GI)
- Regular review to assess improvement in function & QOL
- Consider tapering...

General Considerations in Opioid Weaning...

- When to taper or stop?
- Preparation for dose reduction?
- Strategies for outpatient weaning?



(1) When to Taper or Stop



- If the medication is not providing 'meaningful' pain relief or improvement in function..
- If the patient develops intolerable side-effects – risk of harm escalates with no added benefit $\geq 120\text{mg}$ oral morphine equivalent/24hours.
- If misuse or concern regarding aberrant drug-related behaviour.
- If there is strong evidence that the patient is diverting his/her medications to others.



(2) Preparation for Dose Reduction

- Motivation to wean.
- Explanation of rationale for tapering opioids including potential benefits of opioid reduction (avoidance of long-term harms and improvement in ability to engage in self-management strategies).
- Patient information leaflet
- Agreeing outcomes of opioid tapering.
- Support during tapering (including psychology support for mental health co-morbidities) and arrangements for follow-up (nurse/mdt).
- Anticipate and address specific concerns regarding opioid withdrawal and rebound pain.
- Close collaboration between the patient, his or her carers, GP, other specialty teams.
- Agree prescribing responsibilities.
- Role of Drug & Alcohol Service to support dose reduction.



(3) Outpatient Weaning

- Immediate release vs sustained.
- Liquid to tablets.
- Dosing interval: scheduled rather than PRN to avoid toxicity-withdrawal/ frequency.
- Rate of wean: 10% of total daily dose every 1-2 weeks
- Opioid rotation if unable to taper on existing opioid regime - reduce total OME by 25-30% to account for incomplete cross-tolerance.
- Frequency of pharmacy dispensing: weekly, alternate day or daily
- Named GP prescriber
- Education on withdrawal and strategies (taper more slowly; Lofexidine/ Clonidine).
- Reassurance regarding rebound pain
- Non-opioid adjuvants - gabapentinoids are opioid-sparing (caution with polypharmacy)
- Non-opioid strategies (psychological support/TENS)

UK – Opioids Aware (I)

www.fpm.ac.uk/faculty-of-pain-medicine/opioids-aware

- FPM/RCoA launched 'Opioids Aware' in 2016
- Evidence-based online prescribing resource to support healthcare professionals & patients
- Broad support – developed in collaboration with medical royal colleges, RPS, BPS, Public Health England, NHS England, NICE, CQC
- Links to other sources
- Doses >120mg OME – risk of harm escalates with no added benefit
- Avoid prescribing 'risk multipliers' (BDZ, Pregabalin)

Home > Faculty of Pain Medicine > Faculty Initiatives > Opioids Aware: A resource for patients and healthcare professionals to support prescribing of opioid medicines for pain

Opioids Aware: A resource for patients and healthcare professionals to support prescribing of opioid medicines for pain

Good practice in prescribing opioid medicines for pain should reflect fundamental principles in prescribing generally. The decision to prescribe is underpinned by applying best professional practice; understanding the condition, the patient and their context and understanding the clinical use of the drug. This resource, developed by UK healthcare professionals and policymakers, provides the information to support a safe and effective prescribing decision.

1. Opioids are very good analgesics for acute pain and for pain at the end of life but there is little evidence that they are helpful for long term pain.
2. A small proportion of people may obtain good pain relief with opioids in the long-term if the dose can be kept low and especially if their use is intermittent (however it is difficult to identify these people at the point of opioid initiation).
3. The risk of harm increases substantially at doses above an oral morphine equivalent of 120mg/day, but there is no increased benefit.
4. If a patient is using opioids but is still in pain, the opioids are not effective and should be discontinued, even if no other treatment is available.
5. Chronic pain is very complex and if patients have refractory and disabling symptoms, particularly if they are on high opioid doses, a very detailed assessment of the many emotional influences on their pain experience is essential.

Initially funded by Public Health England

Public Health England

About the Resource

- > Purpose
- > Who will use this resource?
- > How to use this resource?
- > Trends in opioid prescribing
- > Professional, regulatory and public concerns

Contents

- > Best Professional Practice
- > The Condition, The Patient, The Context
- > Clinical Use of Opioids
- > A Structured Approach to Opioid Prescribing
- > Information for Patients

Quick Links

- > Pain assessment
- > The opioid trial
- > Dose equivalence
- > Oxford Analgesic

Best Professional Practice

Opioids and the law, writing opioid prescriptions, patient safety, reporting harms, record

The Condition, The Patient, The Context

Assessment and challenges of long-term pain, the role of medicines, a stepped approach to opioid

Clinical Use of Opioids

Opioids for different types of pain, their effectiveness and harms, dependence and addiction

A Structured Approach to Opioid Prescribing

Information for

Thank you

