CATEGORY I – CLINICAL PRESENTATIONS: PALLIATIVE CARE

1.0 Introduction

Effective pain management is an important part of good medical care and should be assessed and managed properly in every patient, including those who are addicted to drugs and/or alcohol. Palliative care is specialized medical care for people with serious illnesses. It focuses on providing patients with relief from the symptoms, pain, and stress of a serious illness – whatever the diagnosis. The goal is to improve quality of life for both the patient and the family.

Patients may suffer pain from a variety of physical conditions, either unrelated to their substance misuse, or as a direct or indirect consequence. The direct and indirect sequelae of addictions can include injuries, fractures, abscesses, chest pain, pancreatitis, hepatitis, gastritis, cellulitis, various cancers and, of course, 'psychic' pain.

Since this group are at higher risk of chronic diseases, they are likely to access palliative care services (Neerkin et al, 2011).

Patients who are addicts are just as prone as non-addicts to acquiring painful conditions. Occasionally, patients with chronic pain may become addicted to analgesia.

LEARNING OUTCOMES

Medical students will recognise that

1. Taking an adequate pain history and exploring addiction issues enable appropriate interventions to be offered.
2. Ensuring that patients already receiving opioid substitution for dependence receive adequate analgesia.
3. The significance of observing and evaluating emerging addictive behaviours, including drug-seeking, in patients with life-limiting conditions.
4. Counselling patients who are reluctant to take medication they regard as "addictive" is appropriate.

Vignette

Barry is a 45 year old man with a long history of drinking alcohol and taking diazepam and DF118. Many years ago, in his late teens, he had a brief period of opiate dependence and used to inject himself/be injected with heroin. He has a history of accidents and injuries related to bouts of heavy drinking and binge drinking. Four months ago, he saw his GP, who noted hepatomegaly. The GP sent off blood investigations, including blood-borne virus screening, and the patient was noted to be hepatitis C positive. An ultrasound of his liver was booked, and what appeared to be multiple foci of hepatocellular carcinoma were noted. Subsequent investigations confirmed the diagnosis.

Recently, he has been experiencing abdominal pain.

Initially he was prescribed two co-codamol 30/500 tablets four times daily, but with limited effect. His palliative care team and GP are considering appropriate pain management. They consider slow release morphine and titrate Barry onto an amount that controls his pain. However, he is becoming drowsy at times.

What would you discuss with Barry about the options for pain management?

What other advice would you provide Barry about taking any other medication or alcohol?

2.0 Context

Pain is one of the world's most common symptoms and it affects 7.8 million people in this country.

It has a profound impact on lives, affecting work, relationships and normal daily life.

3.0 Common presentations

Patients with drug or alcohol problems may be associated with painful conditions such as:

- **Trauma:** head injury, fall, accident.
- **Infection:** pneumonia, cellulitis, abscess, septicaemia, injecting, HIV, Hepatitis B and C.
- **Neuropathy:** vascular, traumatic, viral, carcinoma, nutritional.
- **Cancer:** lung, head and neck, oropharynx, oesophagus, liver, colorectum, breast.
- **Musculoskeletal disease:** fractures, osteoporosis, myopathy.
- **Cardiovascular:** chest pain, cardiomyopathy, stroke.
- **Gastrointestinal:** hepatitis, pancreatitis, cirrhosis, peptic ulcer disease.

Reluctance to take opioids

Some non-dependent patients may be reluctant for fear of becoming opiate dependent; some patients who have successfully addressed opiate dependence may be understandably apprehensive about taking opiate analgesia for fear of rapid re-instatement of addiction. If the remaining lifespan is likely to be measureable in weeks or months, this is less of a concern.

For Barry, *he is most concerned about his pain management, but his wife is concerned about his continued use of diazepam to help him feel more relaxed. This is because it is causing him to feel more drowsy and he has fallen a couple of times or fallen asleep with a cigarette still burning.*

What advice would you give Barry and his wife about how he can manage more safely at home, as well as treating his physical and emotional needs?

3.1 Distinctive features

Patients with drug dependence may have a greater than expected need regarding pain relief due to increased tolerance to the drug (Ling et al, 1989). They also have a lower threshold for pain; this means that they will perceive a stimulus at a certain threshold as painful before a non-opiate dependent patient would. They are also likely to require higher doses of analgesia than the non-opiate dependent patient.

Patients who are already using substances or dependent upon substances, may seek greater access to over-the-counter medications, other people's medications and street drugs - they may also use more heroin (diamorphine) to manage their own pain. It is important to ask.

It is necessary to talk to others involved in the patient's care – eg, oncology, substance misuse services, palliative care, occupational therapists.

Just because someone is opiate-dependent is no reason for the doctor to be "opiophobic" about analgesia for the patient.

3.2 Barriers to detection and access

Many patients who are opiate-dependent tend to live at the margins of existence; they may feel distinctly uncomfortable in the normal, formal world of hospitals, appointments, "grateful patientship". They may expect to be stigmatised by people who work in hospitals, and although this has improved lately, they still do.

The main thing to do when you have a patient who is drug- and/or alcohol-dependent is to relax; try to understand the patient and form a therapeutic relationship. You might feel completely out of your depth both when speaking to a "drug addict" and to someone who is dying. Their life experiences up to this point in time are probably several orders of magnitude different to yours. Don't worry about it. Let them educate you.

Health professionals may feel lacking in confidence in their ability to manage this group due to lack of shared common life experience (or training, for that matter), as well as fear of the "other" and being confronted with mortality.

Lack of understanding of relevant pharmacology and concern regarding potential for misuse of prescribed medication can result in pain being poorly managed in substance misusers. Patients may drop out of contact with services and not respond to appointments offered because they

- feel guilt and shame and be reluctant to discuss these problems, and may fear the onset of withdrawal, recurrence of pain, that drugs will not be prescribed, and may 'top up' prescriptions.
- may lack organisational skills to follow complex dosing regimes and to attend clinic for regular follow-up.
- have an iatrogenic addiction to opioids, so may not perceive their problem is one of addiction, and refuse to attend a specialist addiction service. A joint clinic allows these issues to be addressed in the first instance.
- have received short shrift from hospitals/doctors, and be unwilling to come back.

Barry *finds it difficult to adhere to his medication regime and occasionally forgets his treatment due to forgetfulness and confusion, which is being investigated.*

The consultant decides to bring together all those involved in his care to discuss Barry's needs. His sister attends the meeting and asks whether his continued drinking of alcohol has an effect on his physical presentation of ataxia, confusion and memory loss. Barry had previously said that he had stopped drinking; however, he hadn't, but was purchasing alcohol when out walking the dog in the mornings and hiding it in a fizzy drinks bottle at the back of a cupboard in the utility room.

What advice would you give Barry and what other investigations might you consider?

4.0 Assessment

The principles of analgesic practice in patients, whether or not they are drug or alcohol dependent, are the same, though you need to be careful due to the risks of respiratory depression and death.

Diagnosis of the potential cause of the pain and subsequent effective management is achieved by carrying out a full assessment. A complete pain history includes:

- Location of pain, radiations, severity, timing, duration, quality, aggravating/relieving factors.
- Associated sensory disturbances or power loss, type of pain, visceral, neuropathic, somatic or mixed.
- Impact of psychological factors e.g. anxiety and depression, effects on activities of daily living.
- A full analgesic drug history including nature, dose and administration.
- The concept of 'Total Pain' should also be considered. (Dame Cicely Saunders defined the concept of total pain as the suffering that encompasses all of a person's physical, psychological, social, spiritual, and practical struggles).
- Physical examination, to identify any potential cause of the pain.
- Arrangement of appropriate diagnostic investigations and treatment is essential.
- Arrangement for multi-disciplinary assessment to include physiotherapy and occupational therapy, this can be via the specialist palliative care team or in conjunction with the GP.
- Frequent review of effectiveness and/or adverse effects of medication.
- Provide advice regarding driving and taking opioids *(Pease et al, 2004)* and it is recommended that advice is sought from the DVLA regarding fitness to drive: http://www.dft.gov.uk/dvla/medical/ataglance.aspx

5.0 Treatment

The aim of treatment is to ensure that there is a cohesive plan for the management of pain (British Pain Society, 2007). This includes regular supervision and monitoring of the medications since opiates in excess may lead to respiratory depression and death. Those caring for the patient (addiction services, cancer care team/end of life team), must refrain from prejudice.

Addicted patients may be receiving methadone or buprenorphine (or, sometimes, another opiate) as a substitute for heroin from their GP or a substance misuse service. Any opiate analgesia that you prescribe should be a different molecule. This changes when they are no longer able to swallow – all their opiate needs (for both analgesia and dependence) will be met with a diamorphine syringe driver.

If you want them to have opiate analgesia, and they are already maintained on buprenorphine (for their heroin addiction) you will need to stop this – see below.

Titration of non-opioid, opioid and adjuvant analgesics, in the WHO ladder, http://www.who.int/cancer/palliative/painladder/en/) should be regulated against analgesic response in line with clinical guidelines; the distinction between poor analgesic response and withdrawal should be recognised.

If the patient is on a methadone programme, the dose of methadone should not be altered and the appropriate opioid for pain control should be an additional medication (NICE, 2007).

Buprenorphine is being used increasingly in the management of opioid addiction in the management of pain in palliative care. It has partial opioid agonist, partial antagonist, and antagonist of the kappa opioid receptor. Thus it provides a milder, less euphoric and less sedating effect that methadone. Because of its higher affinity for opioid receptors, it reduces or abolishes the effect of additional use of opioids.

If patients require opioids for pain management, the buprenorphine will need to be stopped. This should be discussed with their current prescriber.

Pain Medication	Substance of misuse	Effects
Carbamazepine	Methadone or buprenorphine	Accelerates methadone or buprenorphine metabolism. May cause withdrawal and require a dose increase.
NSAIDs or aspirin	Alcohol	May increase gastrointestinal bleeding.
Opioids	Alcohol Benzodiazepines Cannabis Opioids	Additive CNS depressant actions. Use with care. One study suggests cannabis can potentiate CNS depressant effects of opioids. Prescribed opioids will have additive CNS depressant actions with street-derived opioids. Avoid buprenorphine or nalbuphine as analgesics in patients dependent on illicit opioids as it might precipitate withdrawal symptoms.
Paracetamol	Alcohol	Possible association with increased hepatotoxicity in alcoholics.
Phenytoin	Alcohol Benzodiazepines Methadone or buprenorphine	Chronic heavy intake of alcohol may accelerate phenytoin clearance so that bigger doses are needed Unpredictable. Phenytoin levels may potentially be increased or decreased. Benzodiazepine levels tend to decrease. Accelerates methadone or buprenorphine metabolism. May cause withdrawal and require a dose increase.
SSRIs	Ecstasy and amphetamines LSD	Unpredictable. Possibility of additive serotonin effects especially with ecstasy giving "serotonin syndrome". Fluoxetine can also inhibit the metabolism of amphetamines causing toxicity. SSRIs may blunt ecstasy's pleasurable effects. However, SSRIs are often used with MDMA to prolong the effects, reduce the severity of the "mid-week blues" and may also be neuroprotective. May exacerbate "flashbacks" in some individuals. Pleasurable effects of LSD may be reduced.
Tricyclic antidepressants	Alcohol Benzodiazepines Cannabis LSD Methadone Opioids	Additive CNS depressant actions possible. Additive CNS depressant actions possible. Several case reports of dramatic tachycardia, some requiring emergency intervention. May exacerbate "flashbacks" in some individuals. Theoretically may have additive effects on the QT interval and cause arrhythmias. Additive CNS depressant effect possible.
Valproate	Benzodiazepines	Valproate may increase benzodiazepine plasma levels giving rise to CNS depression.
5HT1 agonists ("triptans")	Ecstasy and other amphetamine derivative	Possibility of additive serotonin effects giving "serotonin syndrome".
From: British Pain Society (2007). Pain and Substance misuse; improving patient experience p16		

It is helpful to consult with specialist addiction services in order manage these complex patients effectively. Substance misusers are highly likely to have other medical and mental health issues and may lead chaotic lifestyles. Where possible they should be managed on slow release preparations in the community and have referral to community palliative care teams to provide them with ongoing support for their physical and complex psychosocial needs. Patients receiving palliative care at home should be strongly supported to ensure safe storage of all medication, especially opioids.

Key points of care and management in the community:

- Have a single point of prescribing and ensure a co-ordinated approach and ensure patient safety. Regular monitoring is mandatory to avoid risk of excess opiates and respiratory depression leading to death.
- Prescribe analgesic medication weekly. Avoid facilitating risk of patients stockpiling controlled drugs or drugs of abuse in the home. This potentially places the patient at risk of being targeted by other drug users for easily accessible drugs.
- Be willing to prescribe additional medication if disease progresses, pain is worsening or patient may be developing tolerance. It may be appropriate that medication is dispensed twice weekly, if patients are unable to regulate their use over the whole week.
- It should be noted that the instability in the regime may be a direct result of the painful condition and may not necessarily denote a negative prognosis.
- Be aware of friends or family members who may try to buy or steal prescribed drugs or who may bring the patient drugs.
- Ensure the Out–of-Hours (OOH) provider is aware of substance abuse issues to allow a sensible OOH prescribing decision to be made. When making significant dose changes or analgesic requirements are escalating rapidly, particularly at high doses, it may be advisable to admit the patient under specialist care to ensure that the change reflects the patient's need and to ensure that the patient does not die from respiratory depression due to opiate excess. Make sure the opiate antagonist naloxone is written up on the p.r.n. (pro re nata – as needed) side of the drug card.
- Removal of drugs from a patient's home after death: after death, all drugs are the property of the deceased's estate. Refer to local policies of removal of controlled drugs from a patient's home.
- If a healthcare professional is concerned about the presence of illicit drugs in a patient's home, it may be appropriate to contact the police, though this should first be discussed with the patient. A heavy-handed approach may lead to disengagement.

6.0 Referral/networks/services

It is important that palliative care staff have access to advice from the specialist substance misuse services and to receive training on substance misuse.

Pain specialists require basic competence in the diagnosis of drug dependence, whilst addiction staff need a knowledge of pain management. It is important to ensure that all services involved in the care of the patient work together to meet the individual's needs of the patient as part of a co-ordinated care plan. Hospitals should have protocols for the management of opiate/alcohol/benzodiazepine withdrawal/initiation/continuation of treatments. Patients may be anxious and distressed by a many aspects of their health and care. Specialist pain, specialist addiction, specialist palliative care and primary care providers need to talk to each other, and with the patient and their families so as to manage the situation whether it be in the general hospital, out-patient clinics, primary care or palliative care.

7.0 References and useful resources

Action on Addiction (2013)The management of pain in people with a past or current history of addiction. https://idhdp.com/mediaimport/38281/130607_pain_management_report__final_embargoed_13_june.pdf

British Pain Society (2007). Pain and Substance misuse; improving patient Experience https://www.britishpainsociety.org/static/uploads/resources/misuse_0307_v13_FINAL.pdf

British Pain Society (2007). Pain and problem drug use -information for patients https://www.britishpainsociety.org/static/uploads/resources/files/book_misuse_patients.pdf

Chief Medical Officer Annual Report (2008) Pain: breaking through the barrier http://webarchive.nationalarchives.gov.uk/+/http://www.dh.gov.uk/en/MediaCentre/Media/DH_096271

Cooper D & Cooper J (2014) Palliative care and substance use: special considerations in Palliative Care within Mental Health - care and practice. Radcliffe Health

Gardner, C (2018) Neglected encounters: addiction and the meaning of pain. The Lancet 391, 10135, pp 2100-2101 https://www.sciencedirect.com/science/article/pii/S0140673618310870?via%3Dihub

Ling GS, Paul D, Simantov R, et al. (1989) Differential development of acute tolerance to analgesia, respiratory depression, gastrointestinal transit and hormone release in a morphine infusion model. Life Sci 45(18):1627-36,

Mao Jianren (2017). Challenges of managing chronic pain BMJ; 356 :j741 https://www.bmj.com/content/356/bmj.j741

Neerkin, J; Cheung, Chi-Chi and Stirling C (2011) Guidelines for Cancer Pain Management in Substance Misusers. https://www.palliativedrugs.com/download/100615_Substance_misuse_pain_guidlines_final.pdf

NICE (2007) Methadone and Buprenorphine for the management of opioid dependence. NICE technology and appraisal guidance 114. https://www.nice.org.uk/guidance/ta114

NICE (2012) Opioids in palliative care: Clinical case scenarios for primary and secondary care. Support for education and learning. NICE clinical guideline 140. http://guidance.nice.org.uk/CG140/ClinicalScenarios

Pease N, Taylor H, Major H (2004) Driving Advice for palliative care patients taking strong opioid medication Palliat Med. 2004 Oct;18(7):663-5

Przekop,P (2015) Chronic Noncancer Pain: Is It Time for A New Treatment http://www.painmedicinenews.com/ViewArticle.aspx?d=Commentary&d_id=485&i=March+2015&i_id=1153&a_id=29605&ses=ogst

Royal College of Anaesthetists Opioids Aware http://www.rcoa.ac.uk/facultyof-pain-medicine/opioids-aware

Scottish Intercollegiate Guidelines Network (2008). Control of pain in adults with cancer – a national clinical guideline. http://www.sign.ac.uk/sign-106-control-of-pain-in-adults-with-cancer.html

Watson M.S. (2009) Oxford Handbook of Palliative Care.2nd ed. Oxford, Oxford University Press

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