NHS Greater Glasgow and Clyde

Pain Assessment & Management in Palliative Care

5-day palliative care module

Objectives

- Understand the process of holistic pain assessment
- Discuss the complexity of pain assessment and pain management in practice – including in cognitive impairment
- Evaluate the presentation and management of different types of pain
- Recognise the range of options in pain management – pharmacological and non-pharmacological

Pain & Analgesia

- What is Pain?
  - A protective mechanism to warn of damage or the presence of disease & part of the normal healing process
  - Injured tissues release prostaglandins (PG) & leukotrienes causing pain receptors to be more sensitive
- 4million people in the world suffer pain daily
  - 60-80% severe pain
  - One of most common symptoms in terminal illness & end of life

Definitions of Pain

"Pain is what the experiencing person says it is, and exists whenever the experiencing person says it does"

(McCaffery and Pasero 1999)

Definitions of Pain

An unpleasant sensory and emotional experience associated with actual or potential tissue damage

(International Association for the Study of Pain 1972)

Holistic assessment

01

Patients own description

02

Assess each pain and identify cause

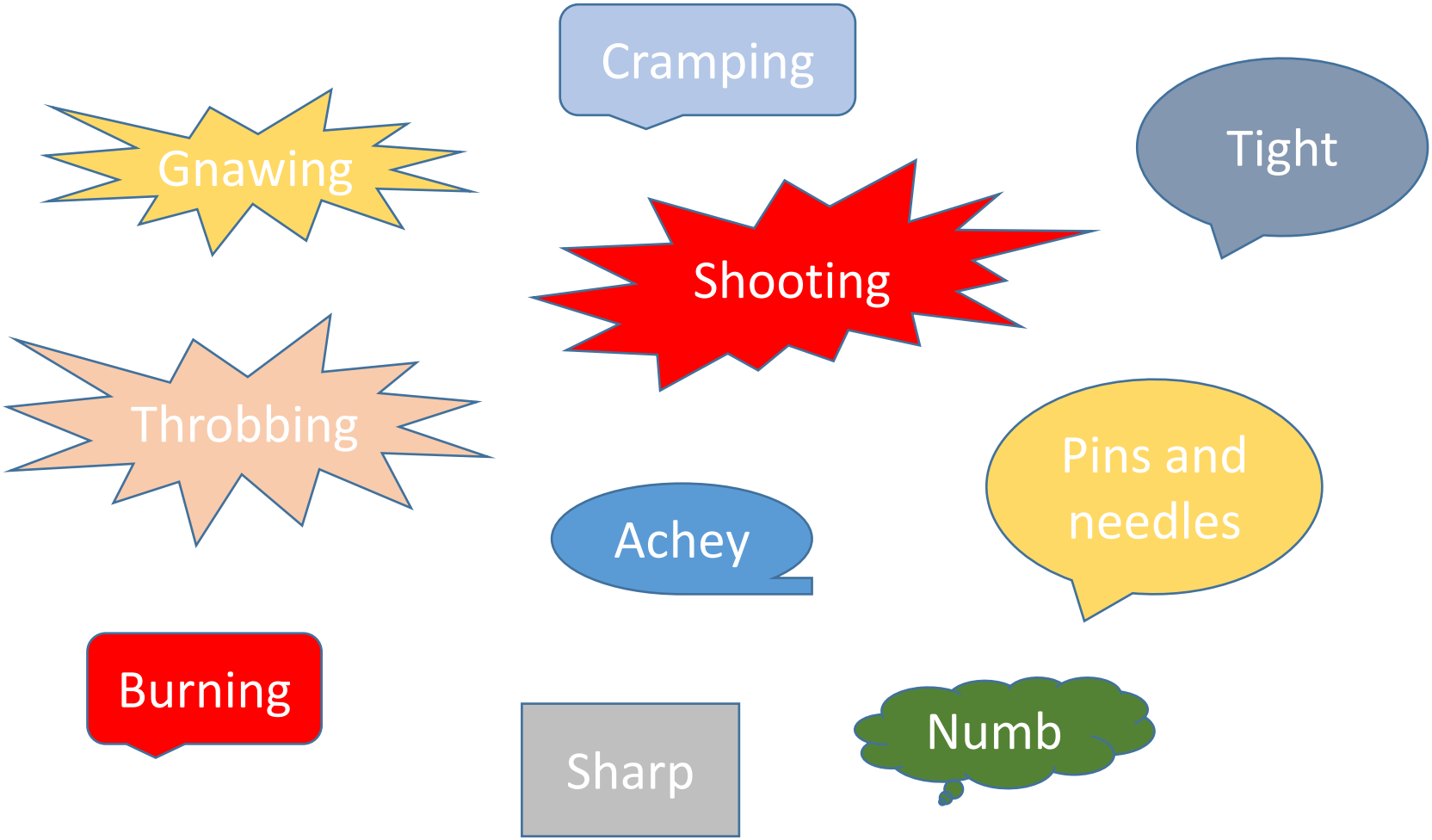
03

OPQRSTUV

04

Assessment tools

Descriptions of pain



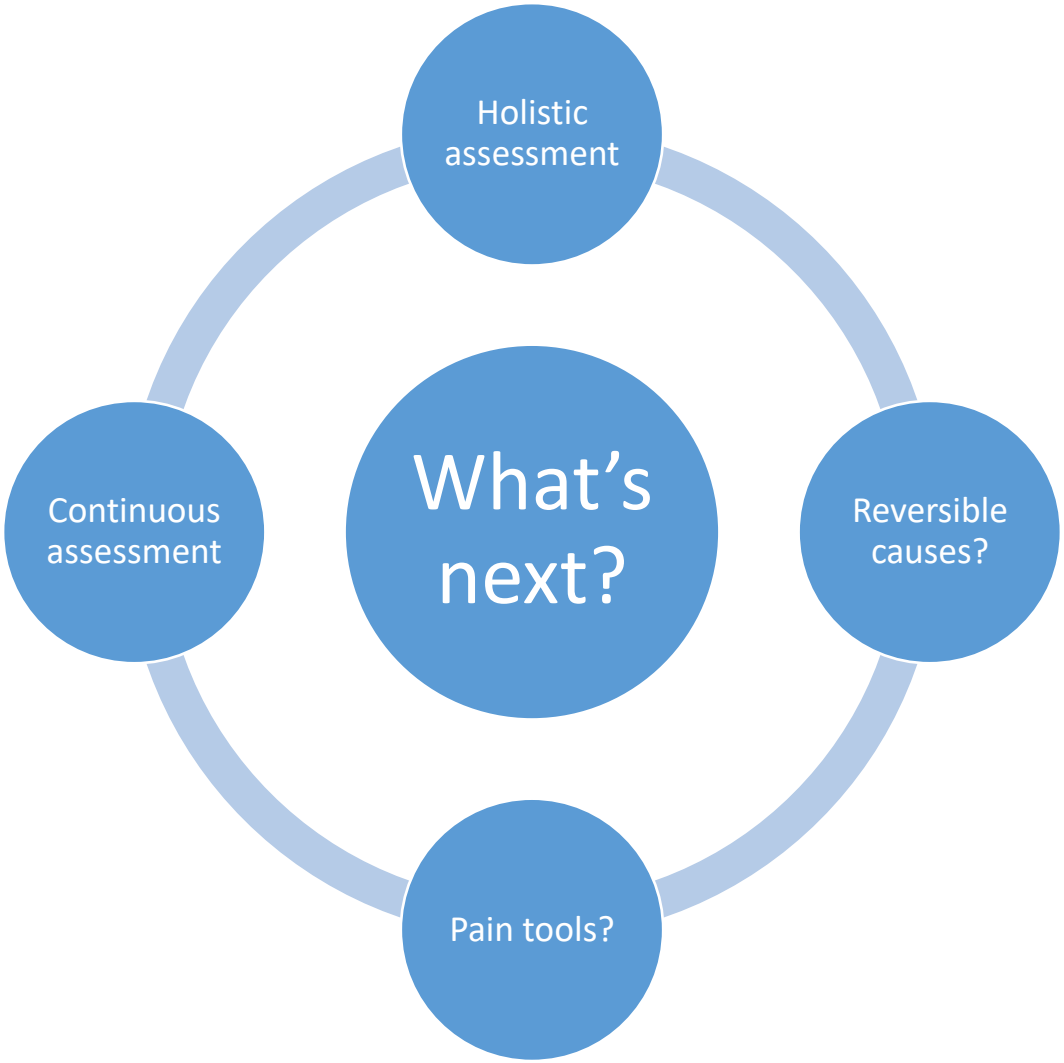
Types of pain

Somatic	Ache, cramping, gnawing, throbbing
Visceral	squeezing, spasms, tight feeling
Neuropathic	Shooting. Burning, pins and needles,
Breakthrough and incident pain	

Challenging pain assessment

- In patients with cognitive impairment
- Speech or language difficulties
- Altered conscious levels
- Different perceptions from families
- ‘Drug seeking’ behaviours

Management - SPCG

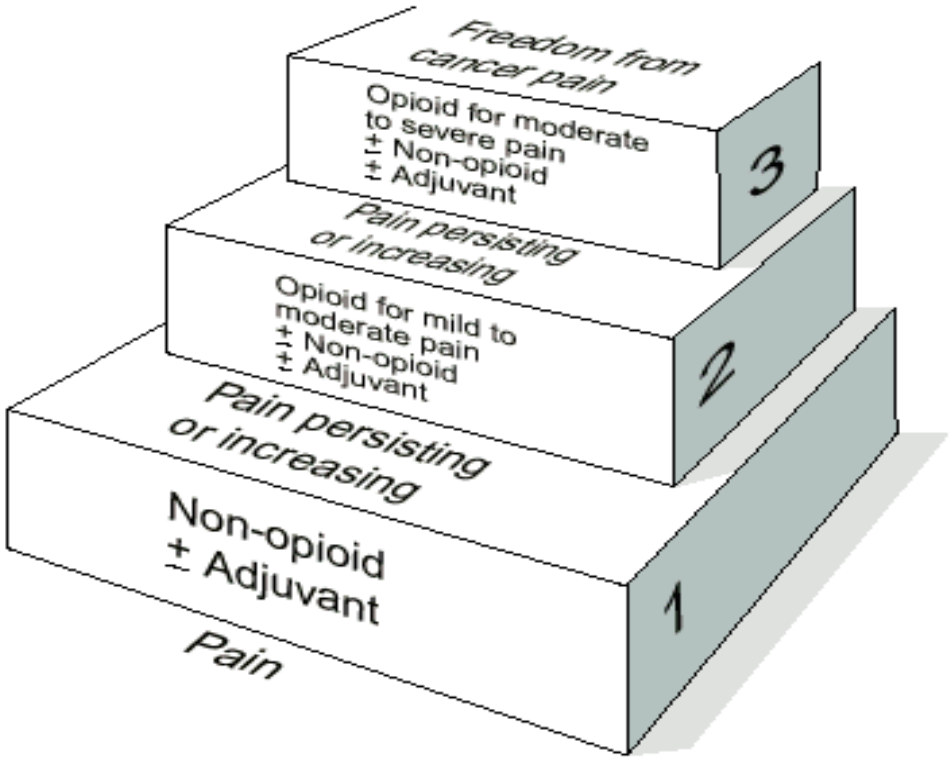


Pain Management

"By using a combination of appropriate dosage guidelines and the use of the WHO pain ladder it should be possible to achieve adequate pain relief in 70-90% of patients with cancer"

Van den Beuken-van Everdingen MJ *et al. Pain* 2007; **137**: 312-32.

Analgesic ladder (WHO)



Adjuvants

- An **adjuvant analgesic** is a medication that is not primarily designed to control pain but can be used for this purpose

Adjuvants

- Adjuvants are mainly unlicensed apart from gabapentin, pregabalin, duloxetine and lidocaine 5% plasters
- Includes NSAIDs, antidepressants, anticonvulsants, bisphosphonates, corticosteroids, antiarrhythmics
- Can use single agent or combinations

Examples of Drugs in the Ladder

STEP 1	STEP 2	STEP 3	ADJUVANT
Co-Codamol 8/500	Codeine Phosphate	Morphine IR e.g. oramorph	Amitriptyline
Paracetamol	Tramadol	Morphine MR e.g. Zomorph	Carbamazepine
Aspirin	Co-Codamol 30/500	Morphine Sulphate	Gabapentin
Diclofenac Sodium	Dihydrocodeine	Oxcodone IR e.g. shortec capsules or oxynorm liquid	Dexamethasone
Ibuprofen	Sevodyne (Buprenorphine)	Oxycodone MR e.g. longtec	
		Oxynorm Diamorphine	
		Buprenorphine	
		Fentanyl	

Step 1 Analgesia – Mild Pain

- Paracetamol tabs
  - Unknown mode of action (?inhibits prostaglandins)
  - Well absorbed orally with ~80% bioavailability
  - Reaches peak levels after 30-120mins
  - 90% liver metabolism & renal clearance (half-life 1-4hrs)
  - Dose reduction if <50kg, poor nutritional status, chronic alcohol abuse, LFTs^
- NSAIDS e.g. ibuprofen, naproxen, diclofenac
  - Analgesic + anti-inflammatory – inhibits COX1+2
  - Useful in bone pain, soft tissue, liver capsule pain
  - ^ risk cardiac, renal & GI side effects (PPI)
  - Diclofenac can be given SC

Step 2 Analgesia – Moderate Pain

Codeine

Dihydrocodeine

Tramadol

- Mild opioid receptor binders (agonists)
  - Require liver metabolism to active metabolite (e.g. codeine -> morphine)
- Contraindicated in liver impairment or CKD 4-5
- Max dose codeine/dhc equivalent to 24mg PO morphine/24hr
- Max dose tramadol equivalent to 40mg PO morphine/24hr

Buprenorphine

- Buprenorphine (3/4/7 day patch) partial agonist only
- Contra-indicated in acute or unstable pain
- Useful in CKD
- 5mcg/hr patch equivalent to 12mg PO morphine/24hr

Step 3 Analgesia (Opioids) – Severe Pain

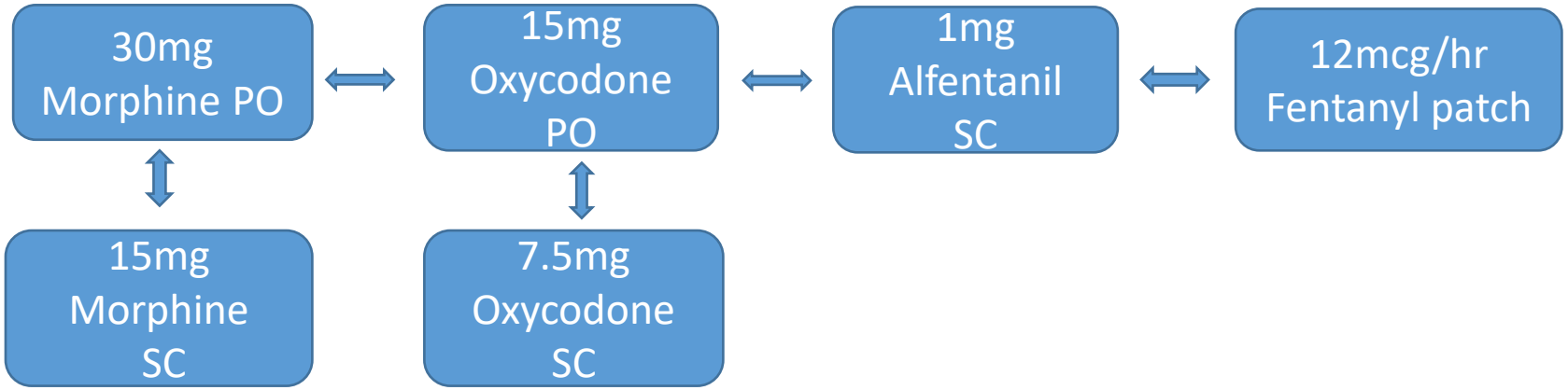
- Use dates back to 3rd Century BC
- Opioid analgesia derived from Opium
- Greeks dedicated the opium flower to the Gods of:
  - Death (Thanatos)
  - Sleep (Hypnos)
  - Dreams (Morpheus)
- PO/SC: Morphine, Oxycodone
- SC/Sublingual/Buccal: Alfentanil
- Transdermal/Sublingual/Buccal/nasal: Fentanyl
- Can cause n+v, constipation, dry mouth, hallucinations, anorexia, respiratory depression
- Can also be used in low doses for SOB

Opioids

- **Double check: name, strength, formulation, dose, route** 
- Oral opioids formulated in Immediate release (IR) or Modified release (MR) preparations
  - MR – slow onset, long half-life. Useful for background pain e.g. Zomorph, MST, Oxypro. Caution: some are 24hrly Vs 12hrly
  - IR – quick onset, short half-life. Useful for breakthrough pain or regular low doses if appropriate (elderly, SOB) e.g. Oramorph, Actimorph, Shortec
- Buccal/Sublingual/Intranasal opioids e.g. Abstral, Pecfent
  - Rapid onset 5-10min. Useful for movement, painful personal care if already on opioids
  - Max 4 doses in 24hrs (then titrate strength)
- Naloxone reversal agent – only if RR <12 if end of life

Choosing or Changing an Opioid

- Consider:
  - Available route/strength
  - Renal + liver function
  - Is pain stable?
  - Potency & *approx.* equivalent dose, HOWEVER usually reduce by ~33%



Side effects of opioids

Benefits

Side effects/ toxicities

Patches

- Lidocaine plaster
  - Useful for rib fractures, neuropathic pain
  - 12hrs on followed by 12hr patch-free period to avoid tolerance
  - 3% systemic absorption, well tolerated but caution in severe heart disease
  - Trial of 2 weeks

- Fentanyl & buprenorphine patches
  - Useful in **stable** pain
  - Continue if patient commenced on CSCI
  - Takes 12hrs to work – give alternative analgesia
  - "Transdermal patch check" on Hepma
  - Apply to intact, non-hairy skin on the upper trunk or upper arm + rotate site
  - Heat can ^ absorption
  - To dispose: fold in half then sharps box, wash hands

When to use the SC route?

- Persistent nausea and vomiting
- Dysphagia: intermittent or continuous
- Profound weakness
- Unacceptable number of oral medications
- Reduced level of consciousness
- Intestinal obstruction
- Malabsorption or suspected malabsorption of oral medication
- Severe stomatitis
- Head and neck surgery/disease
- Terminal restlessness and agitation
- Patient choice

Common Drugs Used via SC route

- Opiates – Morphine, Oxycodone, Alfentanil
- Antiemetics – Cyclizine, Metoclopramide, Haloperidol, Levomepromazine
- Anxiolytics - Midazolam
- Anti-inflammatories – Seek advice
- Neuropathic drugs – Seek advice
- Anti- secretory drugs – Hyoscine Butylbromide
- Anti-convulsants
- Others – e.g. Octreotide, methadone

Practical advice for analgesia

- Breakthrough dose should be 1/6th to 1/10th 24hour dose requirement. Review if uses 6/24hr or 3 in 4hrs
- Double check fentanyl + alfentanil
- Fentanyl patch can be left on if CSCI started
  - Hot baths, temp >39
  - Prescribe Transdermal patch check on HEPMA
- Dexamethasone SC as e.g. 4mg or 8mg and add note for volume (3.3mg/ml)
  - You can prescribe BM check for patients on steroids on HEPMA
  - Max 2ml SC
- Treating anxiety can reduce opioid requirements
- Consider fentanyl SL/Buccal for short-lasting incident pain e.g. bone mets
- Monitor side effects – laxatives, anti-emetics, mouthcare.

Non-pharmacology

Be aware of concept of total pain

- Complimentary therapy
- Relaxation
- Acupuncture
- TENS machine

ANY QUESTIONS?