

Symptom Management in Palliative Care

Delirium and Pain

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Delirium - outline

- What delirium is and why it is important
- How to recognise it
- What to do about it

Delirium = acute brain failure

- *Delirare*: “to go off track”
- Acute confusional state



Diagnosis of delirium

- American Psychiatric Association (DSM IV) - four essential features:
 - Inattention: inability to focus, sustain or shift attention appropriately
 - A **sudden** change in cognition (orientation, memory, perception, language)
 - An acute and fluctuating disturbance in consciousness
 - An underlying medical cause

Sudden and fluctuating: hallmark sign

- **sudden onset and fluctuating change in patient's ability to focus and sustain attention**
- Typically worsens at night, with lucid periods in the morning

Inattention

- Inability to direct, focus and sustain attention
 - distractable
- Serial 7's
- Count down 20-1
- 'WORLD'–'DLROW'

Sudden change in cognition

Disorganised thinking:

- Memory deficit
- Disorientation
- Language disturbance
- Perceptual disturbance

Subtypes of delirium

1. Hyperactive (21%): agitation (pulling lines and catheters, risk of falling), psychosis (disruptive behaviour, refusal of medications, food and fluids), aggression



Pionck JM Jr. J Palliative Med 2005; 8(5):

1042-1054

Hypoactive delirium

2. Hypoactive (29%): lethargy, decreased alertness, non-interactive/staring and slow speech

NB - often missed by healthcare staff

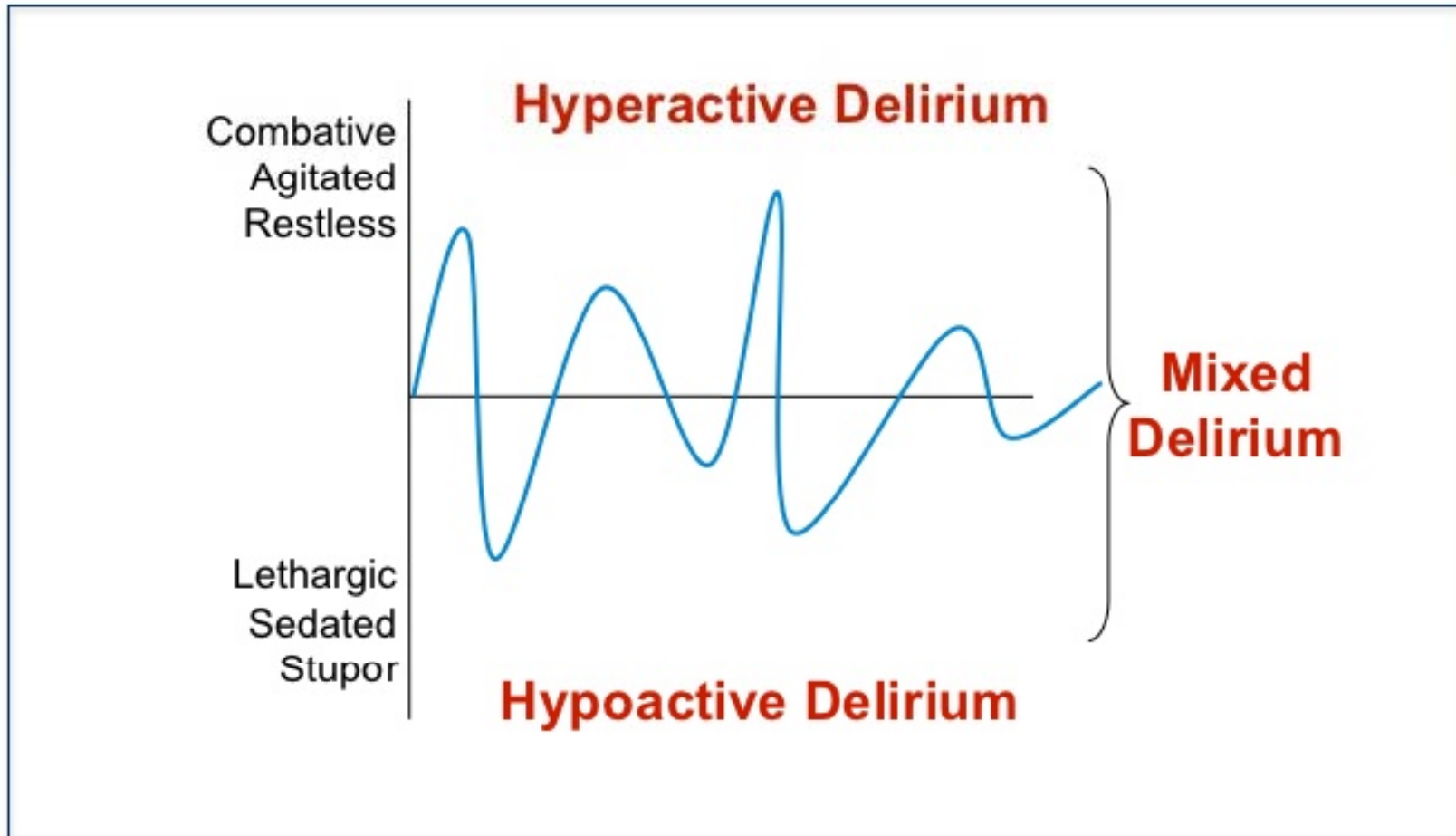


Mixed delirium

3. Mixed delirium(43%): components of both



Delirium Subtypes



Prevalence is high

- 30% -40% of hospitalised elderly
- Up to 85% in advanced/terminal cancer
- But **under-recognised**: not detected in 22-50% cases

Economic burden

- Increased hospital stay and morbidity
 - More hospital-acquired complications e.g. falls & pressure sores
 - Increased risk of long term cognitive decline
 - Loss of independent living, may require long term care
- Mortality: 10 – 65%
- However **30 - 50% cases are potentially reversible**

Why is delirium under-recognised?

- Hypoactive delirium undetected
- Fluctuating nature of delirium
- Pre-existing dementia
- Misdiagnosed as depression or fatigue
- Confusion attributed to hearing or visual difficulties
- Mental health problems common in elderly
- Presumed cognitive impairment – lack of collateral history

Delirium or dementia?

- **DELIRIUM**

Acute

Often remitting &
reversible

Physiological

Attention deficit

- **DEMENTIA**

Chronic

Usually progressive
& irreversible

Structural

Memory deficit

- Delirium and dementia can coexist; in fact delirium is **very** common in demented patients

Baseline risk factors

- **Age 65 yrs or older**
- Cognitive impairment
- Brain injury
- Severe illness
- Cancer

Acute risk factors

- **Medications/withdrawal**
- Infection
- Surgery
- Hypoxia
- Constipation or urine retention
- Organ failure
- Electrolyte or metabolic disturbance
- Change of environment
- Sleep deprivation
- Primary CNS disorders
- Hip fracture

↑ Baseline risk factors + ↑ acute risk factors = ↑ risk of delirium

Diagnosis: The Confusion Assessment Method (CAM)

- Diagnosis requires presence of items 1 and 2 and either 3 or 4:
 - 1. Acute onset and fluctuating course
 - 2. Inattention
 - 3. Disorganised thinking
 - 4. Altered level of consciousness
- MMSE is a screening tool

Management of delirium: medical

Cause	Intervention
Underlying cause	Treat if possible, eg antibiotics
Drug toxicity	Stop or reduce dose of suspected medication Stop unnecessary medication
Opioid toxicity	Decrease dose or switch to alternative opioid
Dehydration	Correct if appropriate
Metabolic or electrolyte disturbance	Correct
Elimination problems	Treat constipation, catheterise bladder

Medications to suspect

- Anticholinergics
- Steroids
- Opioids
- Benzodiazepines
- Anti-emetics
- GABA-ergic medications
- Withdrawal (sudden) from psychotropic drugs
- Chemotherapy

Management of delirium: environmental

- Keep physical and human environment as consistent as possible
- Maintain patient routines, promote daytime activity
- Limit vital sign monitoring and investigations
- A quiet and well-lit room
- Orientate patient frequently (clock, calendar), provide eye-glasses or hearing aids if worn

Environmental interventions contd.

- Explanations to patient: simple and reassuring, separate past and present
- Acknowledge and respect mood



Environmental interventions contd.

- Avoid unnecessary confrontation
- Encourage visits from trusted family member or friend
- Clear explanation to family: what delirium is, goals of treatment and possible outcomes (e.g. information leaflet)

Pharmacological interventions

- Haloperidol is **first line drug**, it is effective in both hyperactive and hypoactive delirium
- Non-sedative but risk of parkinsonian effects
- Contraindications: Parkinson's disease, Lewy Body dementia, delirium tremens – benzodiazepines recommended (at adequate doses)
- Dose 0.5 - 1mg BD and PRN

Pharmacological interventions

- Levomepromazine (Nozinan) where sedative effects desired
- Dose 12.5mg BD, 6.25 – 12.5mg PRN
- Newer antipsychotics: olanzapine, risperidone or quetiapine have less parkinsonian side effects
- Caution in dementia: *all* antipsychotics associated with increased risk of stroke

Prevention of delirium: NICE guidelines (2010)

- “Tailored intervention delivered by a multidisciplinary team”
- About one third of all episodes could be prevented
- Prevention would be cost-effective
- Assess persons at risk within 24 hours of admission

Prevention of delirium: NICE guidelines (2010)

- Pain management
- Medication review
- Infection control
- Preventing hypoxia
- Orientation strategies
- Early mobilization and walking

- Non-pharmacological approaches to sleep
- Maintaining nutrition and hydration
- Adaptive equipment for vision and hearing impairment
- Therapeutic activities

PAIN

Pain: outline

- Definition
- Concept of total pain
- Management of cancer pain

Pain in Advanced Cancer

- Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage
 - IASP, 2008
- “Pain is what the patient says hurts”
 - Cecily Saunders, 1918-2005
- 30-50% patients with cancer will have pain during treatment, rising to 70-90% in advanced cancer

Factors affecting pain threshold

Increase pain threshold:	Decrease pain threshold:
Lack of understanding	Explanation
Anger	Acceptance
Anxiety	Reduction in anxiety/relaxation
Boredom	Creative activity
Depression	Elevation in mood
Insomnia	Sleep
Isolation	Companionship

Total Pain



- “Tell me about your pain.”
- “Well doctor, the pain began in my back but now it seems that all of me is wrong”.
- She gave a description of several symptoms and went on to say, “My husband and son were marvellous but they would have to stay off work and lose their money. I could have cried for the pills and injections but I knew I mustn't. Everything seemed to be against me and nobody seemed to understand”. She paused before she said, “But it is so wonderful to begin to feel safe again”.
- C. Saunders, *Care of patients suffering from terminal illness at St. Joseph's Hospice, Hackney London, 1964*

Total pain: four components

- •PHYSICAL –“The pain began in my back but now it seems that all of me is wrong”
- •MENTAL/EMOTIONAL –“Everything seemed to be against me and nobody seemed to understand”
- •SOCIAL –“My husband and son were marvellous but they would have to stay off work and lose their money”
- •SPIRITUAL –“It is so wonderful to begin to feel safe again”

Total pain: four components

- So, out of what one patient said, very neatly describing her pain to me, developed the idea of “total pain” with these four components
- Then, as now, I know that listening to a patient’s own tale of their troubles can be therapeutic in itself. As another patient said, “It seemed the pain went with me talking.”
– C. Saunders, *A voice for the voiceless, 2003*

Pain management: EEMMA

- Evaluation: diagnose the cause
- Explanation (communication): uncertainty causes anxiety
- Management: individualised treatment
- Monitoring: review impact of treatment
- Attention to detail: no unwarranted assumptions

Evaluation: diagnose the cause

- History: site of pain, quality, onset and duration, what makes it better or worse, severity and interference with activities/self-care
- Cancer or non-cancer causes
- Mechanism: e.g. Neuropathic vs tissue damage (or both)
- Non-physical factors: psychological, social, spiritual

Four types of cause

- The cancer itself: soft tissue, bone, visceral, neuropathic
- Treatments, eg mucositis from chemotherapy
- Debility/deconditioning: posture, muscle tension, constipation
- Other condition, eg osteoarthritis

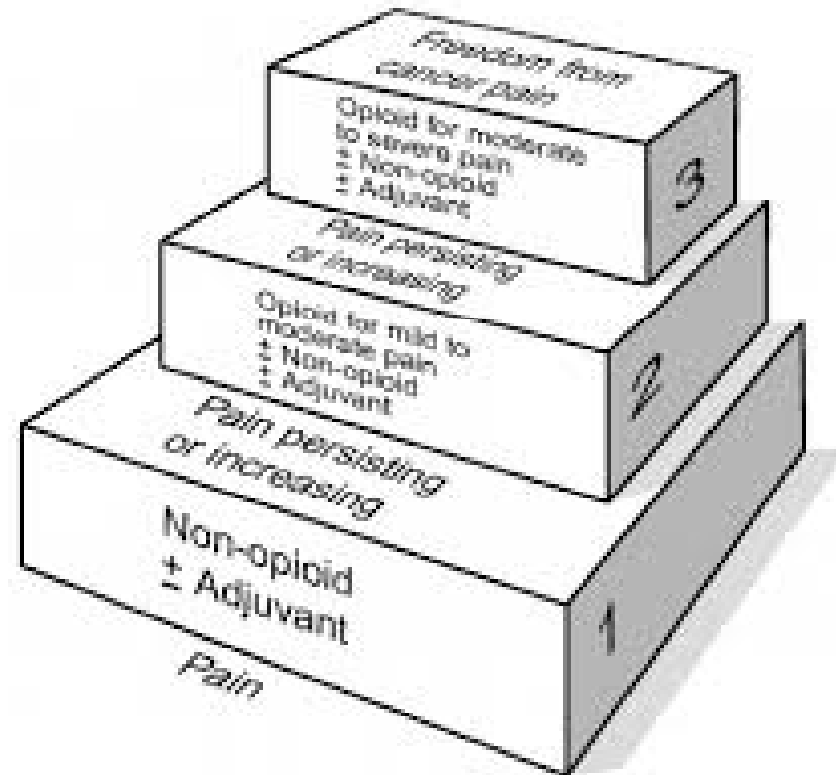
Management of pain

- Aim for progressive relief
- If possible, treat underlying cause, eg chemotherapy
- Non-drug treatments for pain: **radiotherapy**, physical treatments, psychological, occupational therapy
- Analgesic medication
- Combination of above often necessary

Broad-spectrum analgesia

- 3 classes of analgesia: non-opioid, opioid, co-analgesics (adjuvants)
- Non-opioid: paracetamol and non-steroidal anti-inflammatory drugs (NSAIDs) – can be used together with additive effect
- Opioids: weak opioids, e.g. codeine, tramadol; strong opioids, e.g. morphine, oxycodone
- Co-analgesics such as antiepileptic drugs, e.g. pregabalin (Lyrica)

WHO analgesia ladder



WHO analgesia ladder

- Mild to moderate pain: non-opioid analgesics alone or in combination with step 2 (weak) opioids
- Moderate pain: start with low doses of step 3 (strong) opioid
- Severe pain: step 3 (strong) opioids
- Co-analgesics can be used at any step

Analgesia for cancer pain: WHO 1986,1996

- By the mouth
- By the clock: persistent pain requires preventive therapy – analgesics should be given around-the-clock and also as needed (PRN)
- By the ladder: if dose on one step has been optimised and pain persists, move to next step
- Individualised treatment: the right dose is the one that relieves the pain

Non-pharmacological treatments

- Four domains of total pain
 - Physical (including TENS) and occupational therapy
 - Chaplaincy
 - Role of medical social worker
 - Complementary therapy, art therapy, music
- Promote factors that decrease pain
- Consider interventional methods (nerve block)

Breakthrough Pain

- A transient exacerbation of pain despite adequately relieved background pain
- Fast onset, severe, peaks within minutes, average duration 30 minutes
- 2 types:
 - Incident pain is brought on by particular activities (voluntary or involuntary)
 - Spontaneous pain occurs unexpectedly

- Huge impact on daily lives
- Severity does **not** reflect severity of cancer or lack of response to treatment
- Non-drug treatment/prevention
- Medications: opioids, non-opioids, co-analgesics
- Opioids: breakthrough dose varies – 5 to 20% of total daily dose

- Mismatch between duration of breakthrough pain and drug effect, eg oral morphine has slow onset (30 mins) and long duration of effect (3-6 hours)
- If breakthrough pain is predictable, give dose 30 mins beforehand
- Alternatively, use faster route of administration: buccal, sublingual, intranasal