Cancer Treatment and Delirium

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Delirium

De Lira
Literally “to go out of one’s furrow”

History of Delirium

• Galen - primary or secondary mental disorders
• Cosin (1592) ‘continual madness or fury joined with sleep fever’
• Thomas Willis (1621 - 75) - ‘not a disease but a symptom’
• ‘Patients think and do absurd things experience incongruous conceptions, confused thought due to fever, drunkenness, poisoning with mandrake, lack of sleep, hysterical passions or gangrene

Acute brain failure
Acute brain syndrome
Acute cerebral insufficiency
Acute confusional state
Acute organic psychosis
Agitated confusional state
Cerebral insufficiency syndrome
Dysgerastic reaction
Exogenous psychosis

• Metabolicencephalopathy
• Pseudosenility
• Reversible cognitive dysfunction
• Reversible dementia
• Reversible toxic psychosis
• Subacute befuddlement
• Toxic confusional state
• Toxic delirious reaction
• Toxic encephalopathy
• Toxic psychosis

DSM IV Criteria

1. Disturbance of consciousness or awareness
2. A change in cognition or the development of a perceptual disturbance that is not better accounted for by pre-existing dementia
3. The disturbance develops over a short period of time (usually hours to days) and tends to fluctuate
4. There is evidence from the history, physical examination or laboratory findings that the disturbance is the direct physiological consequence of a general medical condition, substance intoxication or substance withdrawal

Pathophysiology

• Cholinergic deficit
• Activation of dopaminergic system
• Cortisol
Delirium and Cancer

- 10-30% hospitalised patients
- 85% terminally ill
- Direct effect of cancer
- Indirect effect of cancer or treatment or supportive care
- Unrelated to cancer
- Common symptomatology

Risk factors

- Cognitive impairment
- Drugs especially opiates and multiple drugs
- Renal impairment
- Poor vision
- Frailty

CAM (Confusion Assessment Method)

- Acute onset and fluctuating course
  AND
- Inattention (20-1)
  AND
- Disorganised thinking OR altered level of consciousness

Types of Delirium

Hyperactive - Hyperalert 21%
Hypoaactive - Hypoalert 29%
Mixed 43%

Consequences of Delirium

- Higher mortality
- Loss of independance
- Impaired communication and distress
- Increased length of stay
- Falls and injury
- Oversedation and aspiration
- Psychological
- Dementia
Presentations

- 'a bit muddled'
- 'not themselves'
- 'confused'
- 'agitated'
- 'a bit knocked off'
- 'vague'
- 'obtunded'
- 'flat'

Cause

- Single cause < 50%
  - Infection
  - Drugs
  - Electrolyte disturbances / post op
- No acute cause 25%

Drugs That Cause Delirium

- ANTICHOLINERGIC
  - Oxybutinin
  - Tricyclics
  - Cimetidine
  - Propranolol
  - Digoxin
  - Piriton
- OTHERS
  - Benzodiazepines
  - Opiates
  - L dopa
  - Tramadol
  - Vincristine
  - Interferon

Investigations

- FBC
- U + E, LFTS, CRP
- Glucose
- Calcium
- Chest X-Ray
- ECG
- Blood gases
- Blood Cultures
- CT Head
- Thyroid Function

Management

- Treat underlying cause
- Clocks and calendars
- Hearing aids and glasses
- Lighting
- Sleep
- Adequate fluid intake
- Explanation
- Encourage Mobility
- Maintain O₂ sats
- Regular and repeated cues
- Analgesia

‘You are much less likely to become delirious if your care is directed at helping you see what you are doing, hear what’s happening, move around, get some sleep, and have enough to drink in an environment where people talk to you and let you know what’s going on.’

Vincent (2010)
Drugs Management

- Avoid if possible
- To treat distressing and dangerous behavioural symptoms
- Haloperidol
- Alternative Lorazepam
- Start low / go slow (0.5mg)
- Review and tail off
- One to one care

Avoiding delirium in treatment of cancer

- Choose your patient
- Cognitive and functional assessment
- MOCA
- Multicomponent intervention
- Rationalise drug treatment
- Anticipate

References

- NICE Guidelines 2010
- Breitbart W and Alici Y Evidence-based treatment of Delirium in Patients with Cancer Journal of Clinical Oncology 2012;30:1206-1214
- Bush SH and Bruera E The assessment and Management of Delirium in Cancer Patients The Oncologist 2003;14:1039-1049