

Pain Management for the Hospitalized Client with Delirium

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Delirium

- Altered mental state with acute onset
- Fluctuating course
- Disturbances in consciousness, orientation, memory, thought, perception and behavior



Pathophysiology

- Disturbances of particular neuronal pathways and certain neurotransmitter pathways
- Acetylcholine, dopamine, serotonin, GABA, cortisol & beta-endorphin
- Cytokines
- Any metabolic or infection can cause delirium

Flacker & Lipsitz (1999)
Broadhurst & Wilson (2001)
Rigney (2006)



Incidence of delirium

- 10 to 20% at time of admission
 - 41 to 87% in ICU
- As high as 65% post orthopedic surgery

Cofer (2005)
Morrison, Magazine, Gilbert, Koval, McLaughlin, Orosz et. al (2003)
Vaurio, Sands, Wang, Mullen & Leung (2006)



Health Care costs

- Increased length of stay
- Increased post- discharge service requirements



Challenges to detecting delirium

- Lack of knowledge of assessment techniques
 - Fluctuating nature of disorder
 - Lack of communication among providers
 - Presence of dementia & depression
- Lemiengre, Nelis, Joosten, Braes, Foreman, Gastmans & Milisen (2006)*
Rigney
Pun (2007)



Types of Delirium

- Hyperactive
- Hypoactive
- Mixed subtype



Adverse Physical Consequences of Delirium

- Malnutrition, Falls, Skin breakdown, Aspiration, Malnutrition
- Increase in functional disability
- Mortality & morbidity
- *Fick & Mion (2008)*



Predisposing Risk factors

- Present illness
- Co-morbid conditions
- Age
- Environment



Precipitating factors

- Hypoxia
- Dehydration
- Electrolyte imbalance
- Hypoglycemia
- Sleep disturbances
- Infection
- Medications



Prevention strategies: Modifying Risk Factors

Provide sensory needs: hearing aides, eyeglasses



Prevention Strategies: effective symptom management

- Pain
- Urinary retention
- Constipation
- Malnutrition



Assessment Delirium

- Cognitive Test for Delirium
- Confusion Assessment Method



Sedation assessment

- Observer's Assessment of Alertness/Sedation
- Richmond Agitation Sedation Scale
- Motor Activity Scale

- Pun & Dunn (2007)



Pain and delirium

- Vaurio et. al. (2006) reported that the higher the pain scores, the greater the risk of delirium
- Numerical pain intensity
- Nonverbal assess through subjective observation



Treatment of delirium

- Identify cause or causes



Treatment

- Non pharmacological
 - Frequent re-orientation; provide memory cues
 - Provide cognitively stimulating activities
 - Use non-pharmacological sleep
 - Early mobilization
 - Range of motion
 - Remove catheters & physical restraints
 - Minimize unnecessary noise
 - Use night lights
 - Use of calming music



Treatment continued

- Scheduled pain management protocol
- Correct dehydration
- Review medications



Preventing injury

- Motion sensor alarm
- Fall risk protocol
- Remove/camouflage tubes
- Use of sitters
- Room near nurses' station (noise needs to be monitored)



Conclusion

- Delirium is a complex syndrome
- Often experienced by the hospitalized older adult.
- Nurses have important role in prevention, detection and treatment


