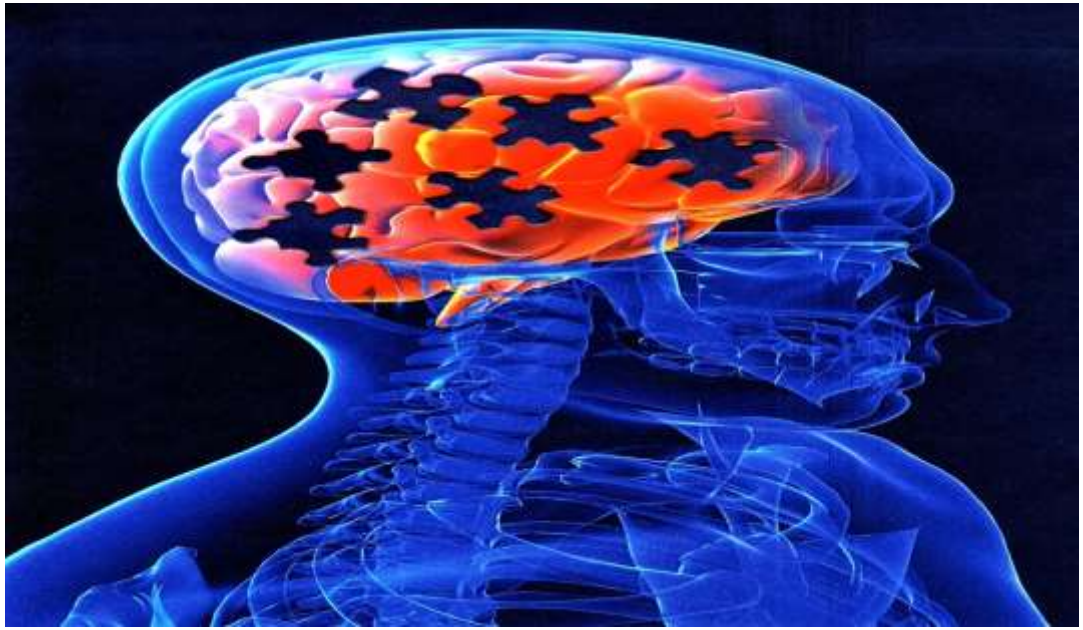
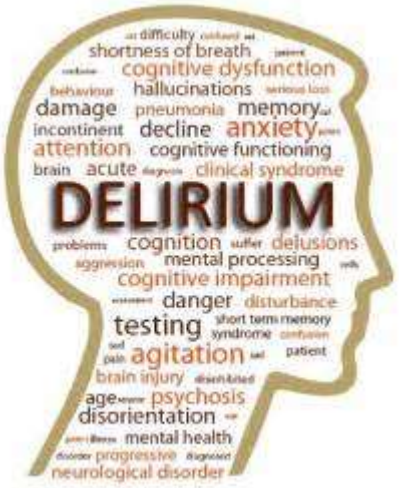
Organic Brain Disorder



Delirium
Acute Organic Brain Disorder

Delirium

Delirium is an acute organic mental disorder characterized by impairment of cons disorientation and disturbance in per and restlessness.



Types of delirium

- Hyperactive or Hyperalert
- Hypoactive or Hypoalert
- Mixed

Types of delirium

- **Hyperactive or hyperalert**
  - the patient is hyperactive and uncooperative.
  - May appear to be responding to internal stimuli
  - Frequently these patients come to our attention because they are difficult to care for.

- **Hypoactive or hypoalert**
- Pt appears to be napping on and off throughout the day
  - Unable to sustain attention when awakened, quickly falling back asleep
  - Misses meals, medications, appointments
  - Does not ask for care or attention

- **Mixed**
  - a combination of both types just described

- The most common types are hypoactive and mixed accounting for approximately 80% of delirium cases

Cause of delirium

Neurological causes-

- Cerebrovasclar SYSTEM- Hemorrhagic stroke, ischemic stroke, transient ischemia attack
- Migraine- Confusional migraine (migraine that alters consciousness)
- Inflammation or infection- encephalomyelitis, brain abscess, CNS vasculitis, encephalitis, meningitis, meningoencephalitis
- Seizure
- Trauma- Subdural hematoma, traumatic brain injury

Non neurological causes-

- Drugs- Anticholinergics, antiemetics, antihistamines (eg, diphenhydramine), antihypertensives,antipsychotics,antispasmodicsbenzodiazepines, cimetidine, corticosteroids, digoxin, dopamine agonists, hypnotics, muscle relaxants, opioids, recreational drugs, sedatives, tricyclic antidepressants.

- Infection- Fever, pneumonia, sepsis, systemic infections, UTIs
- Injuries - Burns, electrical injuries, fat embolism, heatstroke, hypothermia
- Metabolic disorders- Acid-base disturbances, fluid and electrolyte abnormalities (eg, dehydration, hypercalcemia, hypernatremia, hypocalcemia, hyponatremia, hypomagnesemia), encephalopathy hyperglycemia, hyperthermia, hypoglycemia, hypoxia, Wernicke encephalopathy

- Endocrine disorder- Adrenal or pituitary insufficiency, Cushing syndrome, hyperparathyroidism, hyperthyroidism, hypothyroidism
- Hematologic disoreders- Hyperviscosity syndrome, leukemic blast cell crisis, polycythemia, thrombocytosis

- Vascular or circulatory disorders - Anemia, cardiac arrhythmias, heart failure, hypoperfusion states, shock
- Vitamin deficiency- Thiamin deficiency, vitamin B_{12} deficiency
- Withdrawal symptoms- Alcohol, barbiturates, benzodiazepines, opioids

Predisposing factors-

- Extremes of age
- H/O delirium
- Alcohol or drug dependence
- Generalized or focal cerebral lesion
- Chronic medical illness
- Pre-and post-op
- Severe psychological symptoms
- Rx with psychotropic drugs
- H/O head injury
- Vision impairment
- Malnutrition

Clinical Features

Impairment of consciousness

Clouding of consciousness ranging from drowsiness to stupor and coma.

Impairment of attention

Difficulty in shifting, focusing and sustaining attention.

Perceptual disturbance

Illusion and hallucination (visual)

Disturbance of cognition

Impairment of abstract thinking and comprehension

Impairment of immediate and recent memory, increased reaction time.

Psychomotor disturbance

- Hypo or hyperactivity, enhanced startle reaction.

Disturbance of sleep wake cycle-

Insomnia or inn severe cases total sleep loss, daytime drowsiness, disturbing dreams or nightmares that leads hallucination after awakening.

- **Emotional Disturbance-**
- Depression, fear, irritability, euphoria, apathy.

Diagnostic Evaluation:

- Mental status examination
- Standard diagnostic criteria to confirm delirium
- Thorough history
- Directed physical examination and selective testing to determine cause

Special tests

- Complete blood counts
- Blood chemistries (including electrolytes, renal and hepatic indexes, and glucose)
- Serologic tests for syphilis
- HIV antibody test
- Urinalysis
- Electrocardiogram
- Electroencephalogram
- Chest radiograph
- Blood and urine drug screens

Additional tests when indicated

- Blood, urine, and cerebrospinal fluid (CSF) cultures
- B_{12}, folic acid concentrations
- CT & MRI
- LP and CSF examination

Treatment

- Correction of the cause and removal of aggravating factors
- Supportive care
- Management of agitation

- Correcting the cause
- (eg, treating infection, giving fluids and electrolytes for dehydration).
- Nutritional deficiencies (eg, of thiamine or vitamin B_{12}) should be corrected, and
- Good nutrition and hydration should be provided

Drug therapy

- **Haloperidol**
- Risperidone
- Risperidone
- Quietpine
- **Benzodiazepines** (eg, lorazepam)

Psychotherapy

- Music therapy
- Individual therapy
- Family therapy
- Group therapy
- Education
- Supportive therapy

Nursing process:

- Assessment
- History collection
- Physical assessment
- Mental status examination
- Mini mental status examination

Assessment

- Identify and treat the underlying etiology
- Increase observation and monitoring – vital signs, fluid intake and output, oxygenation, safety
- Discontinue or minimize dosing of nonessential medications
- Coordinate with other physicians and providers

Nursing diagnosis:

- Risk for trauma related to falls, poor coordination, confusion, lack of understanding.
- Disturbed thought process related to disorientation, memory deficits, suspeciousness.
- Disturbed sensory perception related to hallucinations, confusion.
- Impaired verbal communication related to inability to recall objects name, right words for the object, loss of memory.
- Self care deficit related to inability to perform daily living activities.

Expected outcome

To prevent from trauma.

To improve thought process.

To improve sensory perception.

To improve verbal communication.

To improve self care abilities

Interventions

- Monitor and assure safety of patient and staff
  - suicidality and violence potential
  - fall & wandering risk
  - need for a sitter
  - remove potentially dangerous items from the environment
  - restrain when other means not effective

Cont....

- Assess individual and family psychosocial characteristics
- Establish and maintain an alliance with the family and other clinicians
- Educate the family – temporary and part of a medical condition – not “crazy”
- Provide post-delirium education and processing for patient

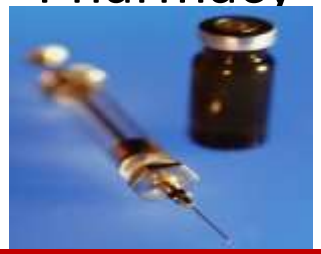
Cont....

- Environmental interventions
  - "Timelessness"
  - Sensory impairment (vision, hearing)
  - Orientation cues
  - Family members
  - Frequent reorientation
  - Nightlights

Prevention

Risk factors

- Cognitive impairment
- Dehydration/electrolyte imbalance
- Sensory deprivation/ sleep disturbances
- Pharmacy



Intervention

- Routine mental status assessment, staff education
- I&O, skin assessment, early recognition
- Non pharmacologic sleep aids, decreased noise and light at night, frequent rest periods, daytime activities
- Staff education of medication side effects, pharmacy liaison, start low go slow

Points to be remembered while taking care of patient

Getting their attention

- Gain the persons attention
- Turn off extraneous noise
- Stand in front of the person and maintain eye contact
- Go slow, direct and redirect their attention

Be aware of your tone of voice

- Do not shout!
- Do not speak in a condescending tone
- Speak slowly

Take care with your use of language

- Use adult language

- Concrete simple language, short phrases
- Be positive and reassuring

- Don't talk about the person as if they weren't there

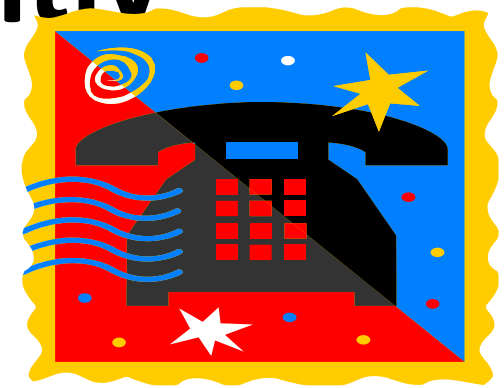
Try yes or no questions

- Use 2 choice questions like do you want juice or soda?
- Are you hungry?
- Are you tired?
- Can I read to you?

Repeat rephrase and repair:

- This is a difficult strategy but is helpful to maintain conversation and helps fill in the missing information the person with dementia may omit
  - **Repeating**-helps fill in speech Ex: I want a cup of…. If you repeat this the elder may add the word coffee, water or juice
  - **Rephrasing**- helps the person hear the corrected response if they say juice you might point to a juice container and say I want a glass of juice
  - **Repairing**-uses both tactics to fix or fill in missing information for example a person points at a pantry cabinet and says, “look there.”, you might say, “your Hungry?”

Orient and reorient frequently



- Use visual aids
- Make sure they have hearing aids or glasses if they need them
- Calendars and message boards
- Keep them up to date, make sure they are easy to locate
- Orient the person with your language

Use touch

- Touch makes us human and is reassuring
- Helps maintain attention during conversation
- Can be calming

Learn to be a good listener

- Listen and watch/ wait for the response
- Do not interrupt
- Be willing to talk about old times then redirect

Delirium V's Dementia

	Delirium	Dementia
Onset	Abrupt	Usually insidious; can be abrupt in stroke/trauma
Course	Fluctuates	Slow decline
Duration	Hours to weeks	Months to years
Attention	Impaired	Intact early; often impaired late
Sleep-Wake	Disrupted	Usually normal
Alertness	Impaired	Normal
Orientation	Impaired	Intact early; impaired late
Behaviour	Agitated, withdrawn or depressed; or combination	Intact early
Speech	Incoherent; rapid/slowed	Word finding problems
Thoughts	Disorganised, delusional	Impoverished
Perceptions	Hallucinations/illusions	Usually intact early

References

- https://www.healthline.com/health/delirium#:~:text=Delirium%20is%20an%20abrupt%20change,after%20surgery%2C%20or%20with%20dementia.
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3065676/

School of Nursing

Course Code : BSCN3003 **Course Name: Mental Health Nursing**

Thank You
Thank You
Thank You!!!!

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