

# Level 4

DELIRIUM

26.8.2020

10-11 am

# defination

dysfunction in cerebral metabolism,

- ⊙ Is transient
- ⊙ reversible
- ⊙ has an acute
- ⊙ or sub acute onset
- ⊙ neuropsychiatric abnormalities.

# delirium

- ⊙ Delirium itself is not a disease
- ⊙ Is a clinical syndrome(a set of symptoms),
- ⊙ There is an underlying disease
- ⊙ Is symptomatic manifestation of early brain or mental dysfunction (for any reason).
- ⊙

# Delirium -common usage

Delirium may be used to mean

- ⊙ drowsiness
- ⊙ disorientation.
- ⊙ **The state of delirium most familiar to the average person is that which occurs from extremes pain, lack of sleep, or emotional shock.**

# "delirium." medical usage

- ⊙ sudden inability to focus attention,
- ⊙ sleeplessness
- ⊙ severe agitation
- ⊙ irritability,

# Delirium-clinical presentation

There is an acute decline in

- ⊙ Attention-focus,
- ⊙ Perception
- ⊙ Cognition
- ⊙ consciousness (eg, reduced clarity of awareness of the environment).

# Delirium clinical presentation

- ⊙ There is a change in baseline levels of cognitive function
- ⊙ Which is not accounted for by a- preexisting, established, or evolving dementia
- ⊙ Delirium has a rapidly fluctuating time course unlike in dementia.

# Definition---- Summary.

- ⊙ Delirium has also been referred to as 'acute confusional state' or 'acute brain syndrome'. The key word in both of these descriptions is "acute" (meaning: of *recent onset*),



# EPIDEMIOLOGY

- ⊙ 10-15% of pts on acute medical surgical wards .
- ⊙ 30-40% of elderly hospitalized patients.
- ⊙ Delirium is the most common acute disorder affecting adults in general hospitals.

# PRECIPTATING FACTORS

Existing medical diseases e.g.

- in-post cardiology patients ts – 13% - 67%
- 3. burn patients – 18-30%
- 4. patients with pre-existing brain damage (dementia, stroke) ↑81%.

# PRECIPTATING FACTORS

- ⊙ patients with drug dependency and withdrawals
- ⊙ patients with AIDs.
- ⊙ psychosocial factors
- ⊙ Sensory deprivation
- ⊙ Sleep deprivation

# PRODROMAL SYMPTOMS

- ⊙ Restlessness
- ⊙ Anxiety
- ⊙ Irritability
- ⊙ sleep disruption

# INABILITY TO FOCUS ATTENTION

- ⊙ **No coherent thought**
- ⊙ **disorganized or incoherent speech**
- ⊙ **inability to concentrate (focus attention),**
- ⊙ **lack of any goal-directed thinking.**

# DISORIENTATION

**There is loss of awareness of the**

- ⦿ **surroundings**
- ⦿ **environment**
- ⦿ **And context in which the person exists(time,place, and person).**

# DISORIENTATION IN TPP

1. **Time (not knowing what time of day day of week, month, season or year it is)**
1. **Place (not knowing where one is)**
2. **Person (not knowing who one is)**

# MEMORY FORMATION DISTURBANCE

- ⊙ inability to form short-term memory e.g  
-repeating a phone number
- ⊙ However patients retains previously formed  
long-term memories (i.e., those formed before the  
period of delirium)



# PERCEPTION-IN DELIRIUM

Perceptions are altered

- ⊙ Misperceptions(distortions in size or intensity of the surrounding environment.)
- ⊙ Illusions
- ⊙ Poorly formed hallucinations(sensory experience with the lack of an external source

# HALLUCINATIONS-IN DELIRIUM

## Types

### 1. Visual hallucinations

- ⦿ There is distortions in the form of masses of small crawling creatures (particularly common in delirium tremens, caused by severe alcohol withdrawal)

# DELUSIONS-IN DELIRIUM

- ⊙ False strange beliefs
- ⊙ Usually they are *temporary* delusions
- ⊙ False or delusional memories may persist

# DISTURBANCES OF AFFECT

## Patient

- ⊙ Appear to be in terror
- ⊙ Displays sadness
- ⊙ May be joculous .
- ⊙ *Is Irritable*
- ⊙ May Displays anger
- ⊙ or euphoria.

# DURATION OF DELIRIUM

- ⦿ Affected by the underlying cause.
  - > E.g. delirium subsides as the severity of the fever subsides.
- ⦿ Rarely persists for months -permanent decrements in cognitive function.
- ⦿ Loss of memory and reasoning power
- ⦿ Increased risk of dementia in the years that follow.

# ETIOLOGY

Many organic causes.

- ⊙ Structural defect
- ⊙ Metabolic problem in the brain

Psychiatric-

- ⊙ Mental or emotional stress,
- ⊙ Mental disorders

# FLUACTUATING COURSE

- ⊙ Attention decreased (easily distract able)
- ⊙ Altered arousal and psychomotor abnormality
- ⊙ Disturbance of sleep wake cycle
- ⊙ Disorganised thinking and speech

# NEUROLOGICAL ABNORMALITIES

- ⊙ Dysgraphia (write a sentence)
- ⊙ Construction apraxia – draw a clock
- ⊙ Dysnomia apraxia – name objects
- ⊙ EEG background showing other features



# MOTOR ABNORMALITIES

- ⊙ Tremors,
- ⊙ Asterixis,
- ⊙ Myoclonus reflex
- ⊙ Tone changes

# DSM V diagnostic criteria

## A. Disturbance of consciousness

Reduced clarity or awareness of environment

Reduced ability to:-

- ⊙ Focus
- ⊙ Sustain
- ⊙ shift attention

Disorientation

# DSM V diagnostic criteria

## B. Change of cognition

- ⊙ memory deficit
- ⊙ Language disturbance
- ⊙ Perceptual disturbance
- ⊙ NB: No pre existing dementia

# DSM IV diagnostic criteria

## C. Onset

rapid hrs or days

course fluctuate in day

# DSM V diagnostic criteria

D. Archeologically –  
medical condition as evident by  
LAB, EXAM

# DSM IV diagnostic criteria

E. Outcome – usually reversible

# DIFFERENTIAL DIAGNOSIS

- ⊙ Dementia
- ⊙ Depression
- ⊙ Psychosis

# DIFFERENTIAL DIAGNOSIS

- ⊙ UREMIC encephalopathy
- ⊙ Or psychoactive substance withdrawal
- ⊙ Hypertensive encephalopathy



# DIFFERENTIAL DX 2

- ⊙ Hypoglycaemia
- ⊙ Hypo perfusion of CNS
- ⊙ Hypoxemia

# DIFFERENTIAL DIAGNOSIS

- ⊙ Intra-cranial  
Bleeding or  
Infection e g Meningitis
- ⊙ Poisons
- ⊙ medications
  - > Antibiotics
  - > Anticholinergic
  - > Anticonvulsants

A MNEMONIC FOR CAUSES  
OF DELIRIUM IS:

**“I WATCH DEATH”.**

# I INFECTIONS

- ⊙ Encephalitis
- ⊙ meningitis
- ⊙ Syphilis
- ⊙ Pneumonia,
- ⊙ Urinary Tract Infections

# W WITHDRAWAL

- ⊙ Alcohol
- ⊙ barbiturates,
- ⊙ Sedatives
- ⊙ Hypnotics
- ⊙ opiate

# A ACUTE METABOLIC –

- ⊙ acidosis alkalosis,
- ⊙ electrolyte imbalance
- ⊙ hepatic failure renal failure.

# T - TRAUMA

- ⦿ post operative severe burns. acute to severe pain

# C- CNS PATHOLOGY

- ⦿ Abscesses
- ⦿ normal pressure Hydrocephalus
- ⦿ seizures
- ⦿ strokes
- ⦿ cerebral haemorrhage



# C- CNS PATHOLOGY

- ⊙ Head trauma (i.e., concussion, traumatic penetrating injury, etc.)
- ⊙ gross structural damage from brain disease , tumor, etc.)
- ⊙ Various neurological disorders
- ⊙ Lack of sleep

# H-HYPOXIA

- anaemia,
- carbon monoxide poisoning
- hypo tension
- pulmonary or cardiac failure

# D Deficiencies

vitamin B12

thiamine

niacin

thiamine

# E-ENDOCRINOPATHIES

- ⊙ thyroid
- ⊙ Parathyroid
- ⊙ Hypo pituitarism
- ⊙ hyper/hypoglycemia
- ⊙ Cushing's

# A- ACUTE VASCULAR

- ⊙ – hypertensive encephalopathy and shock, Stroke, MI, PE, heart failure)
- ⊙

# T- TOXINS

- DRUG
- MEDICATIONS (PRESCRIBED - TRAMADOL, RECREATIONAL)

# H- HEAVY METALS

Lead  
manganese  
mercury.

# MAKING THE DIAGNOSIS OF DELIRIUM

history

Mental status

physical status

laboratory examination –

- ⊙ basic
- ⊙ other e.g. L.P



# TREATMENT

1. when aetiology or aetiologies are known
2. when aetiology or aetiologies are unknown
  - a) medical
  - b) pharmacological
  - c) psychosocial

# PROGNOSIS

- ⊙ 10 % mortality depending on care.