

# **Delirium**

**Dr. Moch Bahrudin SpS**

# **Delirium**

- Keadaan akut dan serius,
- Mengancam jiwa
- Di sebabkan oleh berbagai penyakit, gangguan metabolismik dan reaksi obat.

# **Gambaran klinis**

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- Kesulitan dalam mempertahankan atensi terhadap rangsangan luar,
  - Penurunan kesadaran,
  - Gangguan persepsi (halusinasi, ilusi),
  - Gangguan pola tidur,
  - Disorientasi (waktu, tempat, orang)
  - Gangguan memori (new learning ability)
  - Berfluktuasi

# **Delirium !!!!!**

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**Perlu dicermati karena penyandang  
demensia alzheimer sendiri beresiko  
untuk menjadi delirium.**

## **Perbedaan klinis delirium dengan demensia**

<b>Delirium</b>	<b>Demensia</b>
<ul style="list-style-type: none"><li>•Awitan akut dengan waktu awitan diketahui dengan tepat.</li><li>•Perjalanan klinis akut, berlangsung berhari-hari sampai mingguan.</li><li>•Biasanya reversible</li><li>•Disorientasi terjadi pada fase awal penyakit.</li><li>•Fluktuasi dari jam ke jam.</li><li>•Perubahan fisiologis yang nyata.</li><li>•Tingkat kesadaran yang berfluktuasi.</li><li>•Rentang waktu atensi pendek.</li><li>•Gangguan siklus tidur-bangun, bervariasi dari jam ke jam.</li><li>•Gangguan psikomotor jelas terjadi pada fase awal.</li></ul>	<ul style="list-style-type: none"><li>•Awitan tidak jelas dengan awitan tidak diketahui</li><li>•Perjalanan klinis perlahan, bertahap dan progresif memburuk.</li><li>•Biasanya irrevesible.</li><li>•Disorientasi terjadi pada fase lanjut.</li><li>•Fluktuasi ringan pada hari ke hari.</li><li>•Perubahan fisiologis yang tidak begitu nyata.</li><li>•Kesadaran berkabut tahap akhir.</li><li>•Rentang waktu atensi normal.</li><li>•Gangguan siklus tidur-bangun;bervariasi dan siang ke malam</li><li>•Gangguan psikomotor terjadi pada fase lanjut</li></ul>

# Pseudodemensia



Depresi dapat mempengaruhi status kognisi  
penyandang,



Demensia atau pseudodemensia karena depresi.

## Beberapa perbedaan klinis antara demensia dan pseudodemensia

Gambaran klinis	Pseudodemensia	Demensia
<ul style="list-style-type: none"><li>•Awitan (onset)</li><li>•penyakit</li><li>•Mood/tingkah laku</li><li>•Pandangan tentang diri sendiri</li><li>•Keluhan terkait</li><li>•Durasi</li><li>•Alasan konsultasi</li><li>•Riwayat sebelumnya</li></ul>	<ul style="list-style-type: none"><li>•Akut, dengan perubahan tingkah laku</li><li>•Banyak keluhan; seperti tidak dapat melakukan test tetapi hasil tes objektif baik</li><li>•Jelek</li><li>•Ansietas, anoreksia</li><li>•Bervariasi,dapat berhenti spontan / setelah terapi</li><li>•Rujukan sendiri, cemas adanya demensia Alzheimer</li><li>•Riwayat psikiatri dan / atau masalah keluarga / pribadi</li></ul>	<ul style="list-style-type: none"><li>•Perlakan, berbulan-bulan</li><li>•Tes neuropsikologis jelek tetapi penyandang berusaha meminimalkan / merasionalisasi kekurangannya</li><li>•</li><li>•Normal</li><li>•Jarang, kadang-kadang insomnia</li><li>•Keluhan progresif perlakan dalam berbulan-bulan-tahun</li><li>•Penyandang dibawa oleh keluarga yang merasakan perubahan memori, kepribadian dan tingkah laku</li><li>•Tidak jarang ditemukan riwayat keluarga dengan demensia</li></ul>

# Causes of Delirium

## Predisposing

- **Brain disease** - dementia, stroke, past severe head injury
- **Use of brain-active drugs** - sedatives, anticholinergics
- **Impairments of special senses** - sight, hearing
- **Multiple severe illnesses**
- **Malnutrition**

## Precipitating

- **Iatrogenic** - unpleasant environmental change, invasive procedures, new medications, trauma, dehydration, ongoing malnutrition, elimination malfunction
- **Illnesses** - infections, intracranial pathologies, impaired organ function, abnormal metabolite function, pain, drug withdrawal

Creasey, H. (1996) Acute confusion in the elderly. *Current Therapeutics.*

August:21-26.

## ***What are the causes of delirium?***

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- V** (vascular): stroke (infarct or hemorrhage causing a sensory aphasia),
- I** (infectious): herpes simplex encephalitis or other viral encephalitis; bacterial,
- T** (traumatic): open or closed head trauma, acute or chronic subdural hematoma
- A** (autoimmune): systemic lupus erythematosus (SLE), multiple sclerosis
- M** (metabolic/toxic): hypo- or hyperglycemia, hyponatremia, hypercalcemia,
- I** (iatrogenic): drug toxicity (particularly in the elderly): psychotropic drugs,
- N** (neoplastic): primary brain tumor, metastatic brain disease
- S** (seizure): postictal state, nonconvulsive status epilepticus (rare)
- O**ther (psychiatric): bipolar disorder/mania, psychosis

# Pathophysiology of delirium

## Poorly understood

- decreased cerebral oxidative metabolism causing altered neurotransmitter levels

&/or

- stress-induced increased plasma cortisol levels causing altered neurotransmitter activity

Moran, J. & Dorevitch, M (2001) Delirium in the hospitalised elderly. *The Australian Journal of Hospital Pharmacy*. 31(1):35-40.

- cerebral hypo-perfusion in the frontal, temporal & occipital cortex

Yokata, H. et al. (2003) Regional cerebral blood flow in delirious patients. *Psychiatry and Clinical Neurosciences*. 75(3):337-339.

## **MANAGEMENT I: CONTROL OF DELIRIUM**

### **1. Treatment of agitation**

Treatment of delirium depends on the correct identification of the underlying condition. If agitation or combativeness is likely to interfere with the investigation or if there is physical threat to the patient or to the staff, the best medications to use are butyrophenones (e.g., haloperidol), group 3 phenothiazines (e.g., trifluoperazine), or benzodiazepines. **Haldol 2 to 10 mg intramuscularly (IM)** may be expected to reach peak serum levels in

20 to 40 minutes. Repeating

# **COMMON MEDICATIONS THAT CAN CAUSE DELIRIUM**

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## **Anticholinergics**

**Trihexyphenidyl HCl (Artane)**

**Benztropine mesylate (Cogentin)**

## **Anticonvulsants**

Phenytoin (Dilantin) Phenobarbital

**Valproic acid (Depakene/Depakote)**

## **Antihistamines**

**Diphenhydramine (Benadryl)**

Dextromethorphan hydrobromide + promethazine (Phenergan) Cimetidine (Tagamet)

## **Benzodiazapines**

Diazepam (Valium) Temazepam (Restoril) Triazolam (Halcion)

## **Corticosteroids**

**Prednisone**

**Dexamethasone (Decadron)**

Dopaminergic drugs L-dopa (Sinemet) Pergolide (Permax) Bromocriptine (Parlodel)

**Digoxin**

**Disulfiram**

**Indomethacin**

**Lithium**

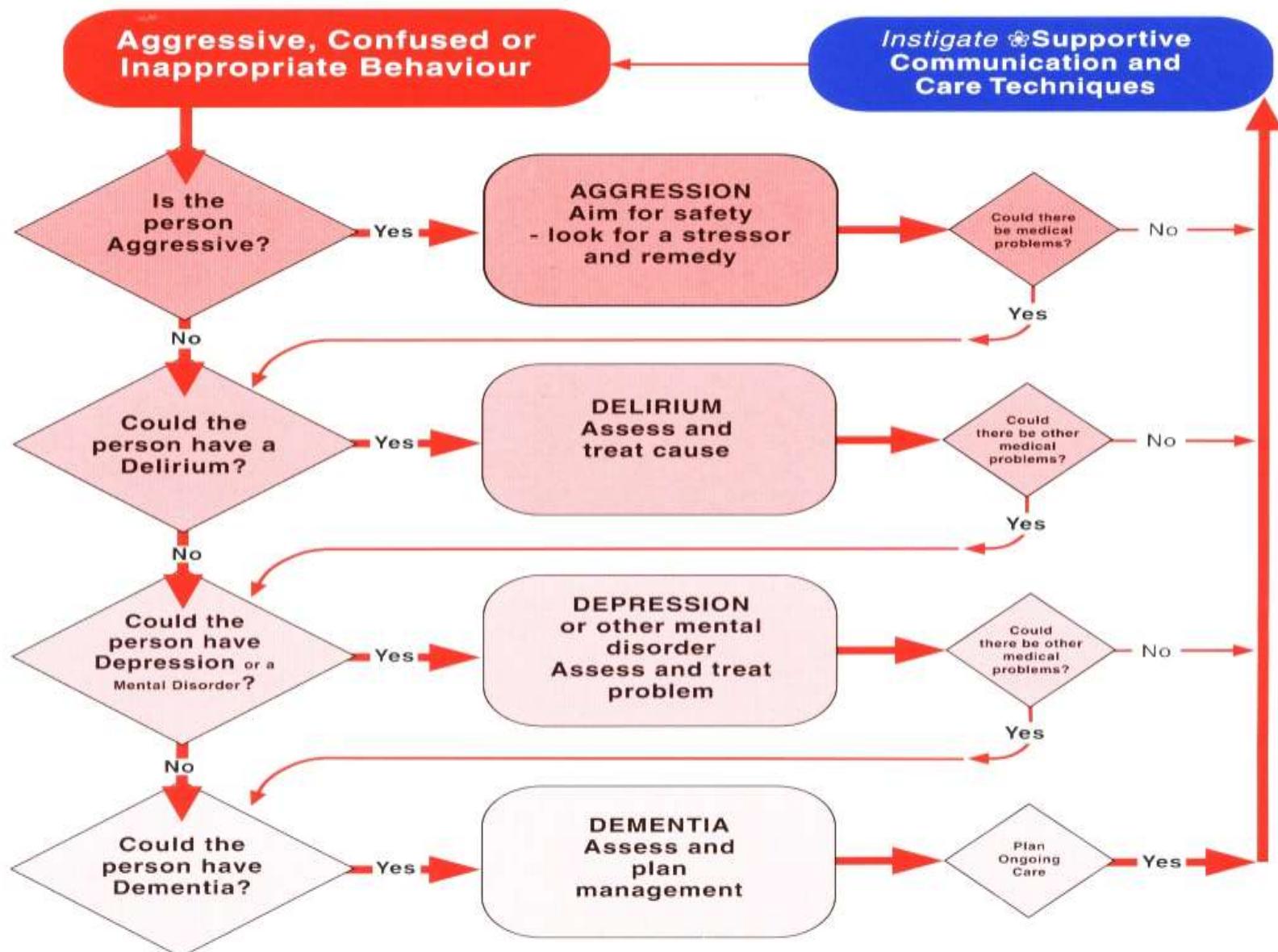
**Opiates**

## **2. The following blood tests should be ordered immediately:**

- Complete blood count (CBC) with differential
- Electrolyte panel, including stat glucose
- Full chemistry panel, including liver function tests
- Urine toxicology screen (if drug intoxication is suspected)
- Urine and blood cultures (if fever is present)
- Arterial blood gas
- Calcium, phosphate

A chest x-ray should be obtained if fever or dyspnea is present. Erythrocyte sedimentation rate may be measured, but its specificity is low.

**Figure 1: Poole's Algorithm: Nursing Management of Disturbed Behaviour in Older People**



The background is a blurred landscape of a sunset or sunrise over water, with warm orange and yellow hues blending into cooler blues and purples. In the lower-left foreground, there's a dark, indistinct silhouette of what might be a beach or a low-lying shoreline.

**THE END  
THANK YOU**

The text "THE END" is positioned above "THANK YOU". Both are written in a large, bold, three-dimensional font. The letters have a bright yellow top half and a fiery orange-red bottom half, with a thin black outline separating them. The perspective of the text makes it appear as if it's floating or falling towards the viewer.