

Common mental problems in elderly

Delirium, Confusion, Dementia, Depression

本講義表格資料取自 Dains, J.E., Baumann, L.C., & Scheibel, P. (2007). *Advanced assessment and clinical diagnosis in primary care*. (3rd ed). St. Louis: Mosby.

圖片取自 Seidel HM, Ball JW, Dains JE, Benedict GW. (1999). Mosby's guide to physical examination. St. Louis, MO: Mosby.

Delirium



- Onset abrupt;
- Fluctuation over course of day common with **lucid intervals during day and worst symptoms at night**
- Lasts hours to weeks
- **Unable to maintain attentions** to external stimuli;
- **Disorganized thinking, perceptual disturbance**
- **Disturbed sleep/wake cycle**
- **Hallucinations, usually visual**
- Decreased LOC, impaired arousal, decreased psychomotor activity, **Disoriented most commonly to time**
- Exhibits asterixis(蹠翼樣震顫), tremor, and difficult in motor relaxation
- Speech incoherent, hesitant

DSM-IV-TR Criteria for Diagnosis of Delirium



- A. **Disturbance of consciousness** (i.e. reduced clarity or awareness of the environment) with reduced ability to focus, sustain, or shift attention.
- B. **Change in cognition** (i.e. memory deficit, disorientation, language disturbance) or the development of perceptual disturbance that is not better accounted for by preexisting, established, or evolving dementia.
- C. **Disturbance develops over a short period of time** (usually hours to days) and tends to **fluctuate** during the course of the day.
- D. History, physical examination, or laboratory evidence indicates that **the disturbance is a direct physiological consequence of a general medical condition, substance intoxication, or medication side effect.**

Confusion



- Less abrupt, less severe than delirium;
- Diurnal variation less severe than delirium
- Concentration impaired; easily distract; errors in thinking
- Apathetic, drowsy, disoriented esp. for time, but less for place, almost never for self

Dementia



- **Chronic** generalized impairment of brain function, **affects thinking but not level of consciousness**
- Onset insidious, course stable through day and night
- Present for months or years, with progressive deterioration;
- **Recent and remote memory impaired**
- Hallucinations usually absent until late in course of disease
- Sleep often fragmented
- **Alert, attentive, orientation usually impaired**
- **Tries hard on mental examine and provide near miss answers**
- Demonstrate one or more of the following **cognitive disturbance**:
aphasia失語症, **apraxia**失用症, **agnosia**認識不能
- Disturbance in executive functioning
- Speech usually unimpaired although **difficult with finding words**.

Cause of Dementia



■ Reversible cause of dementia

- D drugs/medications
- E emotional illness/depression
- M metabolic/endocrine disorders
- E eye/ear involvement/environmental
- N nutritional/neurological
- T tumors/trauma
- I Infection
- A alcoholism/anemia/atherosclerosis

■ Modifiable cause of dementia

- Normal pressure hydrocephalus
- Hepatic encephalopathy
- HIV encephalopathy

■ Irreversible cause dementia

- Alzheimer's disease
- Multi-infarct dementia
- Huntington chorea

DSM-IV-TR Criteria for Diagnosis of Dementia

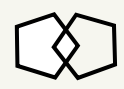


- A. The development of **multiple cognitive defects** manifested by both:
 - 1. **memory deficit** (cannot learn new or previous information)
 - 2. one or more of the following cognitive disturbance
 - a. **aphasia** (language disturbance)
 - b. **apraxia** (impaired ability to carry out motor activities despite intact motor function)
 - c. **agnosia** (failure to identify or recognize objects despite intact sensory function)
 - d. **Disturbance in executive functioning (planning, organizing, sequencing, abstracting)**
- B. The cognitive deficit in A1 and A2 cause considerable impairment in social or occupational functioning and represent substantial decline from a previous level of functioning.

簡易智能量表 (MMSE)



項目	情況描述	
定向感 (共十分)	<input type="checkbox"/> 1分：今年是那一年？ <input type="checkbox"/> 1分：現在是那一月份？ <input type="checkbox"/> 1分：今天是幾日？ <input type="checkbox"/> 1分：今天是星期幾？ <input type="checkbox"/> 1分：現在是什麼季節？	<input type="checkbox"/> 1分：我們現在是在那一個縣、市？ <input type="checkbox"/> 1分：我們現在是在那一個鄉、鎮？ <input type="checkbox"/> 1分：這棟建築是做什麼用的？ <input type="checkbox"/> 1分：這裡的名稱或這裡是哪一科？ <input type="checkbox"/> 1分：現在我們是在幾樓？
記錄登錄 (共三分)	<input type="checkbox"/> 1分：樹木『牡丹』 <input type="checkbox"/> 1分：剪刀『汽車』 <input type="checkbox"/> 1分：火車『石頭』	
注意力與計算能力 (共五分)	請重複這三個名稱，按第一次複述結果計分，最多只能重複練習三次；練習次數：_____	
	<input type="checkbox"/> 1分：93 _____ <input type="checkbox"/> 1分：86 _____ <input type="checkbox"/> 1分：79 _____ <input type="checkbox"/> 1分：72 _____ <input type="checkbox"/> 1分：65 _____	請從100開始連續減7，一直減7直到我說停為止。或請倒著念「台北市政府」。
記憶 (共三分)	<input type="checkbox"/> 1分：樹木『牡丹』 <input type="checkbox"/> 1分：剪刀『汽車』 <input type="checkbox"/> 1分：火車『石頭』	
語言 (共八分)	請病人回想記錄登錄所記的三個東西。	
	<input type="checkbox"/> 1分：(拿出手錶) 這是什麼？_____ 請說出名稱。 <input type="checkbox"/> 1分：(拿出原子筆) 這是什麼？_____ 請說出名稱。 <input type="checkbox"/> 1分：請複誦「白紙真正寫黑字」(台語)或「天生我才必有用」(國語) <input type="checkbox"/> 1分：請病人看「閉上你的眼睛」，唸出並且照辦。 <input type="checkbox"/> 1分：請病人聽指示做三個動作 請用右手拿這張紙 <input type="checkbox"/> 1分：把紙折一半 <input type="checkbox"/> 1分：然後放在地上	
建構能力 (共一分)	<input type="checkbox"/> 1分：請在紙上寫一句語意完整的句子。(含主詞動詞且語意完整的句子) <input type="checkbox"/> 1分：這裡有一個圖形，請在旁邊畫出一個相同的圖形。	



簡易心智狀態問卷 (SPMSQ)



分數	情況描述
<input type="checkbox"/> 1分	<input type="checkbox"/> 現在是幾年？ <input type="checkbox"/> 現在是幾月？ <input type="checkbox"/> 現在是幾日？ <input type="checkbox"/> 現在是幾時？ 全都對才算分。
<input type="checkbox"/> 1分	今天是星期幾？
<input type="checkbox"/> 1分	您現在身在何處？
<input type="checkbox"/> 1分	您家裡的電話或地址？
<input type="checkbox"/> 1分	您今年幾歲？
<input type="checkbox"/> 1分	您的出生年月日或生肖？
<input type="checkbox"/> 1分	現任總統是誰？
<input type="checkbox"/> 1分	前任總統是誰？
<input type="checkbox"/> 1分	您的母親姓氏為何？
<input type="checkbox"/> 1分	請從20開始減3，共減五次，每減一次請回答是多少？ <input type="checkbox"/> 20-3=17, <input type="checkbox"/> 17-3=14 <input type="checkbox"/> 14-3=11 <input type="checkbox"/> 11-3=8 <input type="checkbox"/> 8-3=5 全都對才算分。
分數說明	10至8分表認知功能完整 7至6分表輕度認知功能損傷 5至3分表中度認知功能損傷 2至0分表重度認知功能損傷

Depression



- Onset of confusion often abrupt, with some diurnal variation, generally more consistent over time than delirium.
- **Confusion of short duration**
- Cognitive losses fluctuating rather than stable over time
- **Sleep/appetite disturbance**
- **Hallucination usually absent** although person **may have suicidal thoughts.**
- Depressed or anxious mood; tends to highlight disabilities, esp. memory
- Memory loss equal for recent and remote events
- Physical examination often normal.
- **Depression as a cause of confusion esp. in elderly, is considered a reversible cause of dementia.**
- When anxiety symptoms are also present, depression may manifest as mild delirium

老人憂鬱量表 (GDS) 簡式

分數	情況描述
<input type="checkbox"/> 1分	請評估過去一星期中的情況： 基本上，您對您的生活滿意嗎？（否，得1分）
<input type="checkbox"/> 1分	您是否常常感到厭煩？（是，得1分）
<input type="checkbox"/> 1分	您是否常常感到無論做什麼，都沒有用？（是，得1分）
<input type="checkbox"/> 1分	您是否比較喜歡待在家裡而較不喜歡外出及不喜歡做新的事？（是，得1分）
<input type="checkbox"/> 1分	您是否感覺您現在活得很沒有價值？（是，得1分）
<input type="checkbox"/> 1分	您是否減少很多的活動和嗜好？（是，得1分）
<input type="checkbox"/> 1分	您是否覺得您的生活很空虛？（是，得1分）
<input type="checkbox"/> 1分	您是否大部份時間精神都很好？（否，得1分）
<input type="checkbox"/> 1分	您是否害怕將有不幸的事情發生在您身上嗎？（是，得1分）
<input type="checkbox"/> 1分	您是否大部份的時間都感到快樂？（否，得1分）
<input type="checkbox"/> 1分	您是否覺得您比大多數人有較多記憶的問題？（是，得1分）
<input type="checkbox"/> 1分	您是否覺得現在還能活著是很好的事？（否，得1分）
<input type="checkbox"/> 1分	您是否覺得精力很充沛？（否，得1分）
<input type="checkbox"/> 1分	您是否覺得您現在的情況是沒有希望的？（是，得1分）
<input type="checkbox"/> 1分	您是否覺得大部份的人都比您幸福？（是，得1分）
	分數說明：分數 ≥ 10 分：憂鬱症；5至9分：可能憂鬱

譫忘、意識混亂、失智症、憂鬱常見原因之鑑別診斷

診斷	病史	身體評估發現	診斷性檢查
譫妄	<p>發作突然；病情波動；常見於白天清醒和晚上症狀最嚴重；持續數小時到數週；無法保持對外界刺激的注意力，無組織性的思考，知覺障礙、睡眠／覺醒週期紊亂；幻覺，多為視幻覺</p>	<p>降低意識狀態、喚醒受損、精神運動活力減低；缺乏定向力，多見於時間方面；身體檢查的發現因導致譫妄的原因而異；病人常出現不能保持姿勢、震顫和運動鬆弛困難；語無倫次、吞吞吐吐、說話慢或快</p>	<p>全血球計數(CBC)、電解質、血糖、血中尿素氮(BUN)、肌酸酐、肝功能檢查(LFTs)、甲狀腺功能檢查(TFTs)、維生素B₁₂、梅毒血清檢查、動脈血液氣體分析(ABGs)、葉酸、毒物篩檢、血酒精濃度、尿素氮/肌酐比值、腦波圖(EEG)、胸部X光攝影、腰部穿刺、電腦斷層掃描(CT)或核磁共振攝影(MRI)(當懷疑有腦中風或損傷時)</p>

譫忘、意識混亂、失智症、憂鬱常見原因之鑑別診斷

診斷	病史	身體評估發現	診斷性檢查
意識混亂	突然發作，沒像譫妄那麼嚴重；病情日夜變化但沒有譫妄明顯；注意力受損、容易分神；常見思考錯誤	冷漠、嗜睡；失去定向感特別是時間定向感，但少對地點失去定向感，幾乎沒有自身定向感障礙；運動徵象比譫妄輕微	全血球計數、電解質、血糖、血中尿素氮、肌酸肝、肝功能檢查、甲狀腺功能檢查、維生素B ₁₂ 、梅毒血清檢查、動腦血液氣體分析、葉酸、毒物篩檢、血酒精濃度、尿素氮／肌酐比值、腦波圖、胸部X光攝影、腰部穿刺、電腦斷層掃描或核磁共振攝影(當懷疑有腦中風或損傷時應安排檢查)

譫忘、意識混亂、失智症、憂鬱常見原因之鑑別診斷

診斷	病史	身體評估發現	診斷性檢查
失智症	<p>潛伏性發作、一天中病程穩定；持續幾個月或幾年；進展性衰退；近期和遠期記憶受損；無幻覺一直到疾病晚期；睡眠經常是片段的</p>	<p>清醒、警覺注意的；定向感通常受損；心智狀態檢查，病人努力嘗試，給出「接近錯誤」的答案；表現一個或多個認知紊亂，包括失語症（語言障礙）障礙；失用症（執行運動活動功能受損而非完整運動功能）；失認症（不能辨別或不能辨識物雖然完整感覺功能）；執行功能障礙（規劃、組織、排序、做摘要）； 在阿滋海默氏症型失智症，身體檢查通常無特殊發現；嗅覺可能受損；說話雖然使用詞語困難，語言通常無損； 在多發性梗塞失智症的發現，包括局部神經性徵象／症狀：誇大的深部肌腱反射、陽性的巴賓斯基氏徵象、步態異常、偏癱</p>	<p>全血球計數、電解質、血糖、血中尿素氮、肌酸酐、肝功能檢查、甲狀腺功能檢查、維生素B₁₂、梅毒血清檢查、動脈血液氣體分析、葉酸、毒物篩檢、血酒精濃度、尿素氮／肌酐比值、腦波圖、胸部X光攝影、腰部穿刺、電腦斷層掃描或核磁共振攝影(當懷疑有腦中風或損傷時；對失智症無法提供有用的資訊)；正子斷層造影</p>

譫忘、意識混亂、失智症、憂鬱常見原因之鑑別診斷

診斷	病史	身體評估發現	診斷性檢查
憂鬱	<p>常突然發病，日夜有些變化，一般比譫妄表現更穩定；意識混亂比失智症時間短；常有過去精神病史，包括未被診斷的憂鬱、認知喪失起伏相當穩定；<u>睡眠／食慾障礙</u>；<u>雖然病人有自殺想法，但通常無幻覺</u></p>	<p>憂鬱或焦慮情緒；傾向強調失能，特別是記憶喪失；對近期和遠期事件記憶缺一樣；身體檢查結果多為正常</p>	<p><u>老年憂鬱評分表</u>；全血球計數、電解質、血糖、血中尿素氮、肌酸酐、肝功能檢查、甲狀腺功能檢查、維生素B₁₂、梅毒血清檢查、動脈血液氣體分析、葉酸、毒物篩檢、血酒精濃度、尿素氮／肌酐比值、腦波圖、胸部X光攝影、腰部穿刺、電腦斷層掃描或核磁共振攝影(當懷疑有腦中風或損傷時)</p>



Diagnostic Reasoning: Focused Hx

■ Is This a Condition That Requires Immediate Intervention ?

- How suddenly did the confusion start ?
- Is the patient alert and aware of time, person, and place ?
- Has the patient expressed thoughts of suicide (in word or actions) ?
- Does the patient use alcohol or other drugs ?



Confusion that is acute onset and persistent may indicate delirium.

If the onset is gradual and the patient is not seriously ill, consider depression or dementia

Suicidal ideation may accompany depression requires immediate intervention

Distinguishing Characteristics of confusion.

- Was the onset of the confusion abrupt (i.e., over a period of minutes or hours) or gradual (i.e., a few days, weeks, or months) ?
- Does the confusion change within a 24hour period (stable or fluctuating) ?
- Is there a change in the sleep pattern ?
- Is the patient alert and aware ?
- Has the patient experienced seeing, hearing, or feeling things that are not there ? (common with delirium)
- Is there any history of head trauma ?



Confusion that is abrupt onset but short-lived may indicate a TIA

Sudden onset, usually over a period of hours indicating delirium. (Delirium persists but no longer than 1 month.

With delirium, symptoms may fluctuate over the course of a day and are worst at night and with fatigue. The sleep/wake cycle is fragmented, and the patient tends to be restless and agitated and has hallucinations while awake during the night.

Person with depression and dementia is alert and aware, with delirium is decreased in consciousness.

■ Are there Any Associated Symptoms That Will Point Me in the Right Direction ?

- Has the patient shown any tremor, especially at rest ?
- Has the patient had any trouble walking ?
- Has the patient complained of severe headache and/ or nausea ?
- Has the patient had a fever ?
- Does the patient engage in his/ her usual activities ?



Tremors are associated with parkinsonism, HIV encephalopathy, and liver disease.

Gait disturbance is associated with parkinsonism, medication reaction, and head trauma.

Head and nausea are associated with head trauma, stroke and tumor

Fever is usually present with infection.

Patients with depression may exhibit vegetative symptoms and feeling of worthlessness



■ What Does the Pattern of Cognitive Losses Tell Me?

- What specific problems with mental abilities or thinking have you noticed?
- What behavioral changes or personality changes have you noticed?

Patients with delirium have global cognitive losses that involve memory, thinking, perception, and judgment. They may be completely disoriented, irritable, and fearful. They may be difficult to arouse or conversely have insomnia. They may also present with visual hallucinations.

Dementia presents with selective cognitive losses, cannot remember recent events, disoriented, irritable or depressed, poor hygiene, poor judgment, makes financial errors, socially withdrawn, has difficulty finding or saying right words, is clumsy or falls, has urinary incontinence, deteriorating interpersonal relationships and shows personality change.

Person with depression exhibits apathy and drowsiness, impaired concentration, and errors in thinking, severe negative thinking.

■ Is the Confusion Caused by a Concurrent Health Problem ?

- Does this patient have any chronic health conditions ?
- Has the patient been hospitalized recently, and if so, for what reason ?
- Has the patient been acutely ill recently ?
- Is there a history of mental illness or similar thought disturbance ?

Many systemic conditions associated with confusional states: hypoxia, toxic metabolite, electrolyte imbalance, ...



■ **Could the Confusion Be Caused by Medication ?**

- What medications is the patient taking ?
- Is the patient taking the medications correctly ?

■ **What Risk Factors Do I Need to Consider ?**

- How old is the patient ?
- How many medications is the patient taking ?
- Is the patient HIV positive ?
- Has the patient experienced recent life losses ?

Older adults are at risk for the development of confusion, delirium, dementia and depression.

Dementia occurs in approximately 5~10% in age 65~80, 20% in > 80 y/o, and almost half of > 85 y/o

Diagnostic Reasoning-Focused PE



- Take Vital Signs
- Note Level of Consciousness
- Perform a Mental Status Examination
- Perform a Complete Neurological Examination
 - Cranial Nerves
 - Proprioception and Cerebellar Function
 - Sensation (Primary and Cortical)

- Reflexes
- Moto Tone and Function
- Language
- Localizing and Lateralizing Signs in Central Nervous System
- Perform a Respiratory Examination
- Evaluate the Cardiovascular System
- Examine the Abdomen

Lab and diagnostic studies



- Complete Blood Cell Count
- Blood Chemistry
- Thyroid Function Tests
- Serum B12 and Folate
- Serology for Syphilis
- Arterial Blood Gases
- Toxicology Screen and Blood Alcohol Level

- Urinalysis
- Chest Radiograph
- Lumbar Puncture
- Electrocardiography
- Electroencephalography
- Computed Tomography or Magnetic Resonance Imaging
- Positron Emission Tomography (PET Scan)

Q&A

