

Mild Cognitive Impairment (MCI) and Alzheimer's disease (AD)

輕度認知障礙及阿茲海默症



Gleneagles Hospital

HONG KONG

港怡醫院

Free Shuttle Service 免費專車服務

Gleneagles Hospital Hong Kong provides free shuttle bus service between MTR **Wong Chuk Hang Station** (Exit A) and the hospital (main entrance).

港怡醫院為市民提供免費專車服務往來港鐵**黃竹坑站** (A出口) 及醫院 (正門)。



Free Shuttle Schedule
免費專車服務時間表

MTR 港鐵

Gleneagles is within walking distance from MTR **Ocean Park Station** (Exit C).

您可由港鐵**海洋公園站** (C出口) 步行至港怡醫院。



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What is dementia?

認知障礙症是甚麼?

Dementia is an irreversible neurodegenerative disorder where brain cells decline faster than the normal aging process, hence affecting the cognitive function and the ability to cope with daily living. In Hong Kong, among every 100 people aged 65 and above, 5 to 8 of them suffer from dementia. The most common type of dementia in the city is Alzheimer's disease, which accounts for approximately 70% of cases.

認知障礙症是不可逆轉的腦部退化疾病，患者的腦細胞衰亡速度比正常年老過程快，導致認知及日常生活功能衰退。在香港，每100名65歲以上的長者便有5至8人患有認知障礙症，其中最常見的認知障礙症種類是「阿茲海默症」，佔大約七成個案。

Symptoms of dementia

認知障礙症的症狀

The symptoms of dementia vary among patients depending on different causes and stages. In addition to a decline in short-term memory, people with dementia may also experience:

不同原因或階段的認知障礙症患者出現的症狀皆有所不同。除了短期記憶力減退，患者還有機會出現：

- Emotional or behavioural changes
情緒或行為轉變
- Difficulties in expression or comprehension
表達或理解出現困難
- Poor judgment
判斷力減弱
- Decline in self-care and social abilities
自理及社交能力下降

Causes and types of dementia

認知障礙症的成因與分類

- Alzheimer's Disease
阿茲海默症
- Frontotemporal Dementia
額顳葉認知障礙症
- Vascular Dementia
血管性認知障礙症
- Parkinson's Disease Dementia
帕金森氏認知障礙症
- Dementia with Lewy Bodies
路易氏體認知障礙症

Other factors such as brain injury, infections, diseases, malnutrition, mental health issues, drug toxicity, and alcohol abuse may also lead to dementia. Therefore, patients need to undergo physical examinations to enable the physicians to make a diagnosis and distinguish the type of disorder.

其他成因例如腦部受傷、受感染、疾病、營養不良、精神問題、藥物中毒和酗酒等，也是導致認知障礙症的因素。因此，患者需要接受身體檢查，以作出診斷和分辨病症的種類。

Mild Cognitive Impairment (MCI)

輕度認知障礙

- Patients begin to experience a decline in brain function but still retain their self-care ability
患者的腦功能開始衰退，但依然有自理能力
- Mild Cognitive Impairment (MCI) does not necessarily progress to cognitive impairment, and some patients may be able to maintain their current state or even restore brain function
輕度認知障礙(MCI)並不一定會演變為認知障礙症，患者有機會能夠維持現狀或恢復腦部功能

- There are multiple causes of dementia, with Alzheimer's disease being one of the most common
有多種發病原因，阿茲海默症是最常見的原因之一
- Distinguishing between normal aging and Mild Cognitive Impairment (MCI) can be challenging. Therefore, people should seek medical attention as early as possible when they become aware of changes in cognitive function
正常老化與輕度認知障礙(MCI)難以分辨，當意識到情況有所變化，應及早求醫
- Key symptoms include memory decline, forgetfulness, brain fog, and changes in taste perception
主要病徵：記憶力衰退、健忘、腦霧、味覺出現變化等

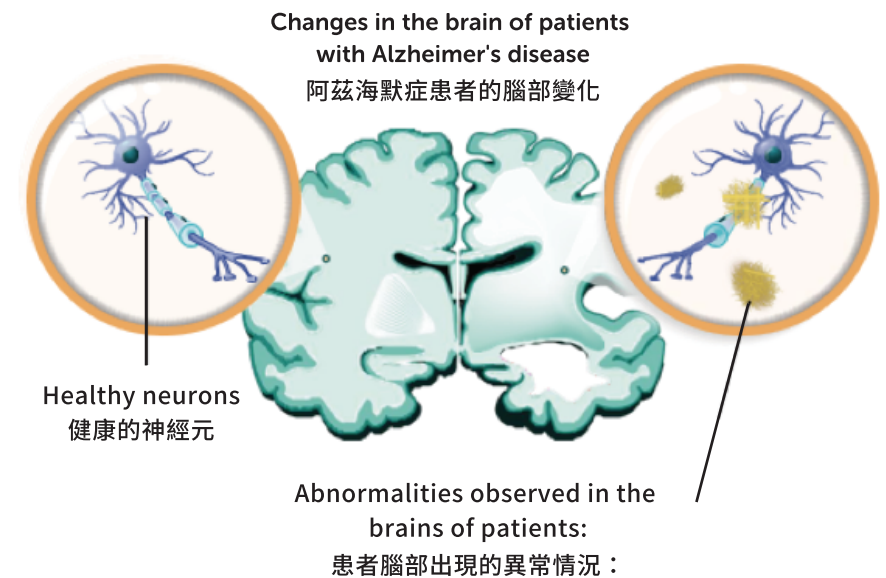


Alzheimer's disease (AD)

阿茲海默症

- Alzheimer's disease is caused by the accumulation of excessive and abnormal amyloid-beta ($A\beta$) and neurofibrillary tangles in the brain, leading to death of brain cells and brain atrophy
阿茲海默症是由於患者的大腦積聚了過量、異常的澱粉狀蛋白($A\beta$)及神經纖維纏結，造成腦細胞死亡和腦萎縮所引致

- Under normal circumstances, amyloid-beta ($A\beta$) can be cleared from the brain
在正常情況下，澱粉狀蛋白($A\beta$) 會從大腦中排出
- For people with Alzheimer's disease, abnormal amyloid-beta ($A\beta$) accumulates in the brain and forms plaques
在阿茲海默症病患中，異常的澱粉狀蛋白($A\beta$) 會在大腦積聚並形成斑塊
- Amyloid-beta ($A\beta$) starts to accumulate in the brain 10 to 20 years before the onset of Alzheimer's disease
阿茲海默症病發前10至20年澱粉狀蛋白($A\beta$)已經開始累積



Amyloid-beta accumulates in the brain and forms plaques (neuritic plaques) that hinder normal functioning of the nervous system:
澱粉樣蛋白在腦部沉積成斑塊（神經斑），阻礙神經系統正常運作：

- Damage to neurons
神經細胞受損
- Functional decline and decreased quantity of neurons
減低神經細胞功能和數量
- Brain atrophy and decline in cognitive function
腦萎縮和認知功能下降

Progression of Alzheimer's disease

阿茲海默症的病情發展

Normal aging process:

正常老化過程：

Everyone experiences mild cognitive changes as part of the aging process

每個人在衰老過程中都會經歷輕微的認知變化

When brain cells undergo pathological changes and degenerate abnormally:

當腦細胞出現病變而不正常地急劇退化：

Preclinical stage 潛伏期

- Silent stage: Changes occur in brain without clinical symptoms
靜默期: 大腦有變化但臨床沒有症狀
- People themselves may notice subtle changes, but no abnormalities are detected in physical examinations
本人可能注意到些微變化，但檢查不出異樣
- It is a stage where the patient is aware of the changes, but others may not notice.
處於病人知道，但其他人未能察覺的階段

Mild Cognitive Impairment 輕度認知障礙

- Patients themselves and their family are aware of the cognitive decline
認知功能退化到本人或家屬能注意到
- One or more cognitive functions are significantly affected
一或多個認知功能有受到顯著影響
- Patients are still able to take care of themselves in daily life
日常生活自理尚可維持

Alzheimer's disease 阿茲海默症

- The cognitive decline begins to affect daily life
認知功能退化到會影響日常生活

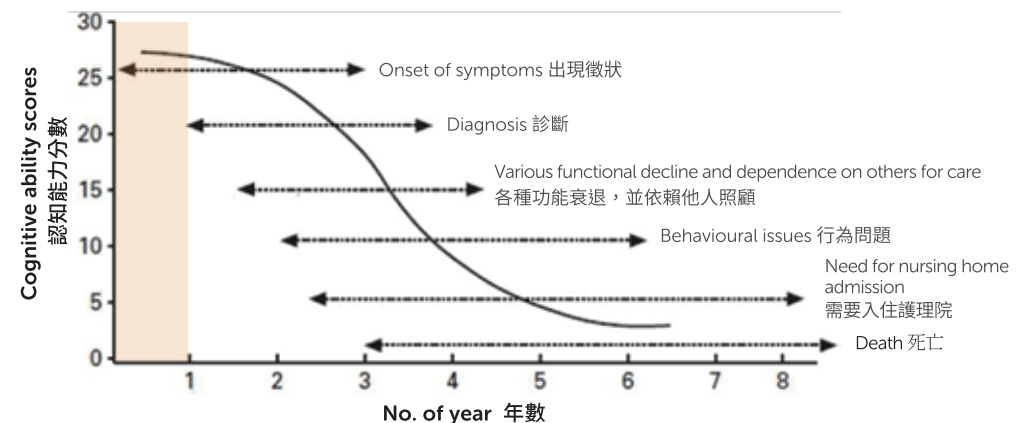
Early detection, diagnosis and preparation for seizing the golden opportunity to receive treatment

早檢測、早診治、早準備 把握治療黃金期

The golden period for treating Alzheimer's disease is the first year after the appearance of symptoms. However, many people mistake the symptoms for normal aging, which hinders patients in seizing the golden opportunity to receive treatments earlier and hence leads to irreversible damage.

阿茲海默症的治療黃金期為出現病徵後的**第一年**，然而不少人誤將病徵當作為正常老化的現象，因而令患者未能把握早期治療的黃金機會，以致造成不可逆轉的傷害。

Golden period for treating Alzheimer's disease 阿茲海默症治療黃金期



How to differentiate Mild Cognitive Impairment and Alzheimer's disease?

如何辨別輕度認知障礙及阿茲海默症?

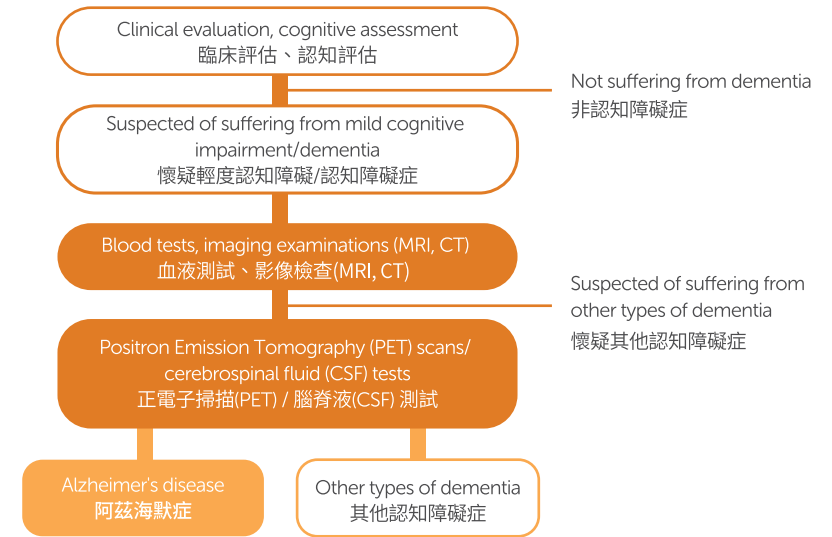
	Mild Cognitive Impairment 輕度認知障礙	Alzheimer's Disease 阿茲海默症
Activities of Daily Living 日常生活功能		
Basic activities of daily living E.g.: Eating, bathing, toileting, dressing, etc. 基本日常生活例如: 吃飯、洗澡、去廁所、換衣服等	Normal 正常	Loss of self-care ability 失去自理能力
Instrumental activities of daily living E.g.: Shopping, housekeeping, financial management, etc. 功能性活動例如: 購物、做家務、財政管理等	Still able to handle these activities independently but may require reminders or assistance from others. 仍能自行應付, 但需別人提醒/ 協助	
Progression of Disease after Onset 發病後的病情進展		
	With proper treatment, the onset of Alzheimer's disease can be delayed. 適當的治療能延緩阿茲海默症病發	The progression of disease can be slowed down, but it cannot be cured. 可減慢病情惡化, 但不能治癒

Mild Cognitive Impairment caused by Alzheimer's disease can progress to Alzheimer's disease after several years. The earlier it is detected and treated, the greater the chance that the progression of the disease can be slowed down.

阿茲海默症導致的輕度認知障礙會在數年後演變成阿茲海默症；越早發現並作出治療，越大機會能減慢病情演變的速度。

How to diagnose Alzheimer's disease?

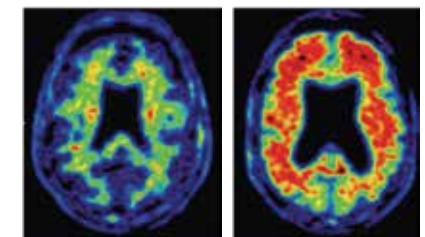
如何診斷阿茲海默症?



Positron emission tomography scan (PET scan)

正電子掃描

The patient will be injected with a radioactive isotope which will bind to amyloid-beta ($A\beta$) in the brain and will then be visualised in the images. 病人會先被注射放射同位素的藥物，藥物會與大腦中的澱粉狀蛋白 ($A\beta$) 結合，在影像中呈現。



Normal condition
正常情況

Patients with
Alzheimer's disease
阿茲海默症患者

Cerebrospinal fluid (CSF) test

腦脊液測試

Medical professionals will extract the patient's cerebrospinal fluid from the space between the patient's spinal bones to measure the volumes of amyloid-beta ($A\beta$). CSF test can diagnose Alzheimer's disease earlier than imaging examinations.

醫護人員會在患者脊柱骨之間的空間抽取患者的腦脊液，用於檢測腦脊液中的澱粉狀蛋白 ($A\beta$) 含量。腦脊液測試比影像檢查能更早診斷阿茲海默症。

Blood Biomarker Testing

血液生物標誌物檢測

There are two methods for blood biomarker testing:

血液生物標誌物檢測方式有兩種：

1. Directly measure amyloid-beta ($A\beta$) and neurofibrillary tangles (Tau) in the blood
直接測量血液中的澱粉狀蛋白($A\beta$)及神經纖維纏結(Tau)指標
2. Test different proteins to estimate the risk of suffering from Alzheimer's disease (AD)
經測試不同的蛋白質，推算出患上阿茲海默症的風險評分



Drug treatments for Alzheimer's disease

阿茲海默氏症的藥物治療

Traditional drugs for relieving symptoms

傳統緩解症狀的藥物

- Generally used in patients with moderate Alzheimer's disease
一般在中度阿茲海默症患者上使用
- Only for relieving symptoms
只能緩解症狀

Anti-amyloid-beta drugs

抗澱粉狀蛋白藥物

- Used in patients with mild cognitive impairment or early Alzheimer's disease
用於輕度認知障礙或早期阿茲海默症患者
- Used to clear amyloid-beta plaques from the brain, hence slowing down the progression of disease and cognitive decline
能幫助清除大腦中的澱粉狀蛋白斑塊，從而減慢病情的進展和認知功能的退化

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****By appointment 敬請預約****

Neurology & Neurosurgery Clinic – Specialist Outpatient Clinic 腦神經內外科門診

Location 位置

Clinic E, G/F, Tower A
A座地下 – 診所E

Opening Hours 開放時間

Monday-Friday	9:00am – 6:00pm
Saturday	9:00am – 1:00pm
Sunday and Public Holiday	Closed
星期一至五	上午九時至下午六時
星期六	上午九時至下午一時
星期日及公眾假期	休息

Enquiries/Appointment

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