

# 眩暈

# Vertigo

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# 想讓大家瞭解：

- 什麼是眩暈？
- 眩暈的成因
- 常見眩暈疾病
- 眩暈的治療

# 什麼叫眩暈

- 眩 vertigo: 旋轉的感覺
- 暈 Dizziness:
  - 不平衡感
  - 晃動的感覺
  - 好像坐船

# 眩暈的成因

- 維持身體平衡的系統出了問題

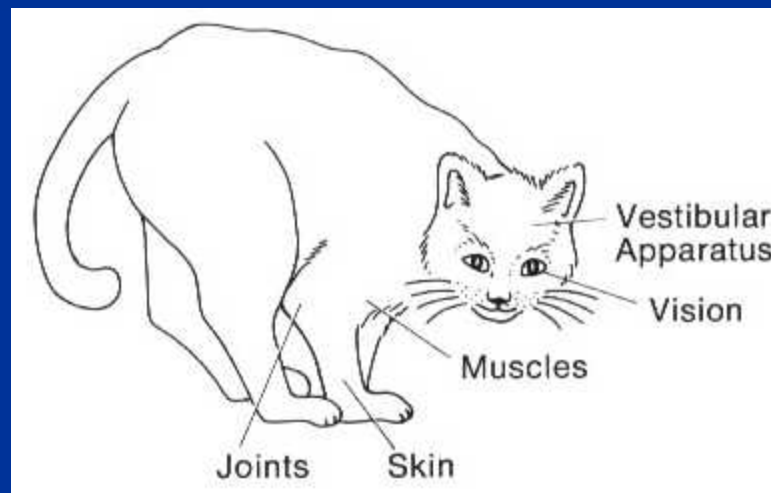
視覺

本體感覺

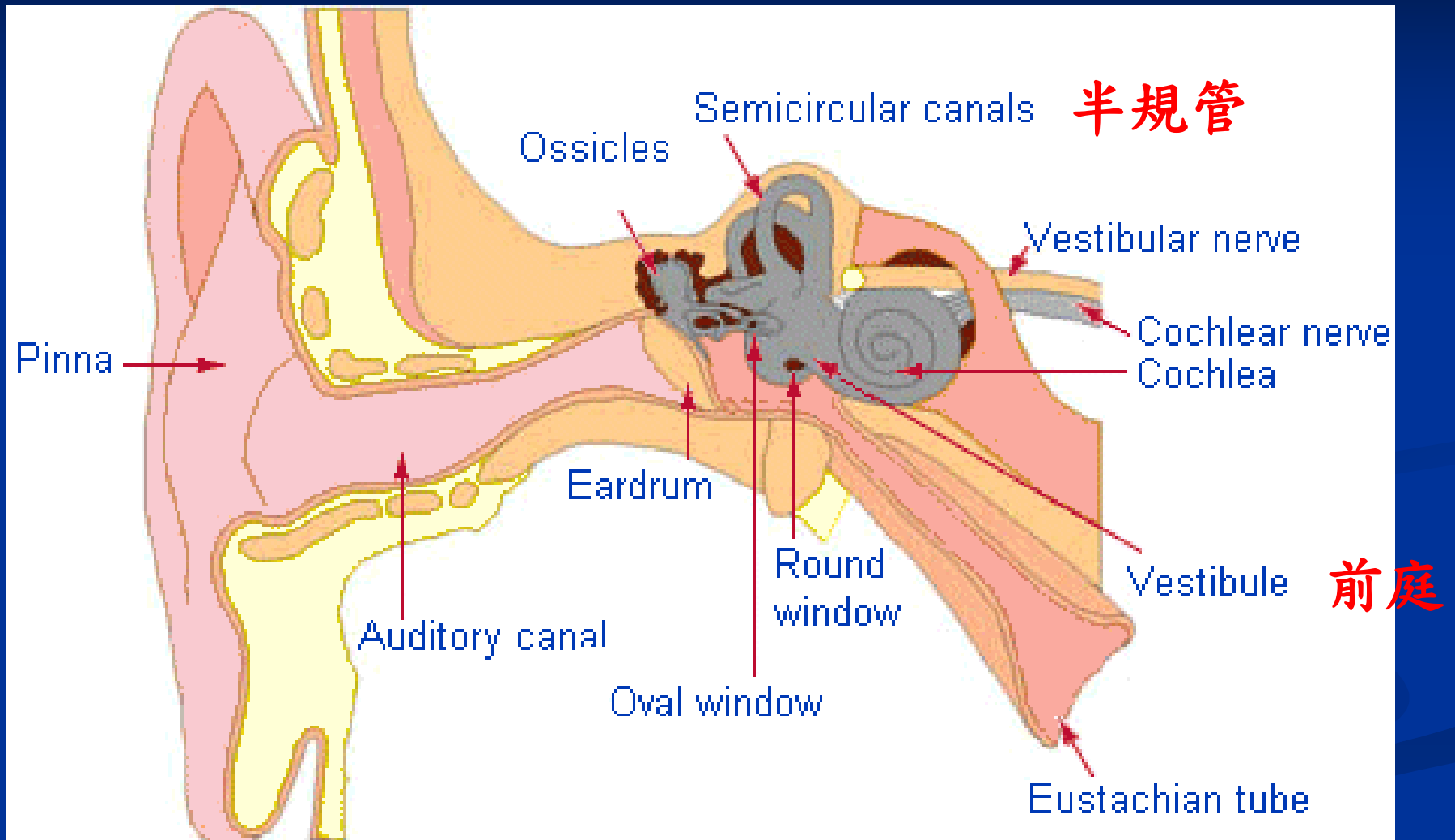
前庭系統

周邊前庭: 內耳

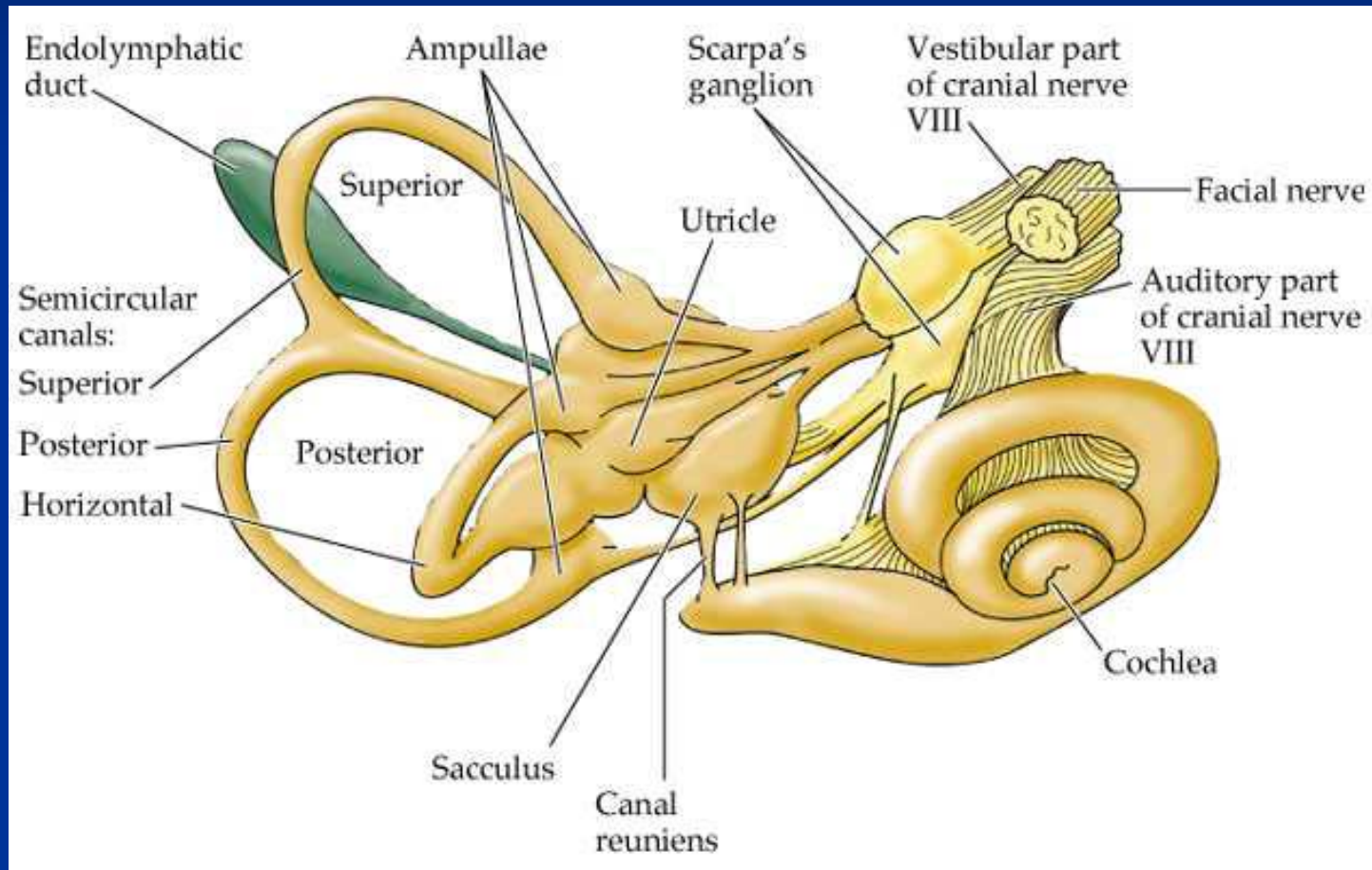
中樞前庭: 腦幹 小腦



# 周邊前庭



# 周邊前庭



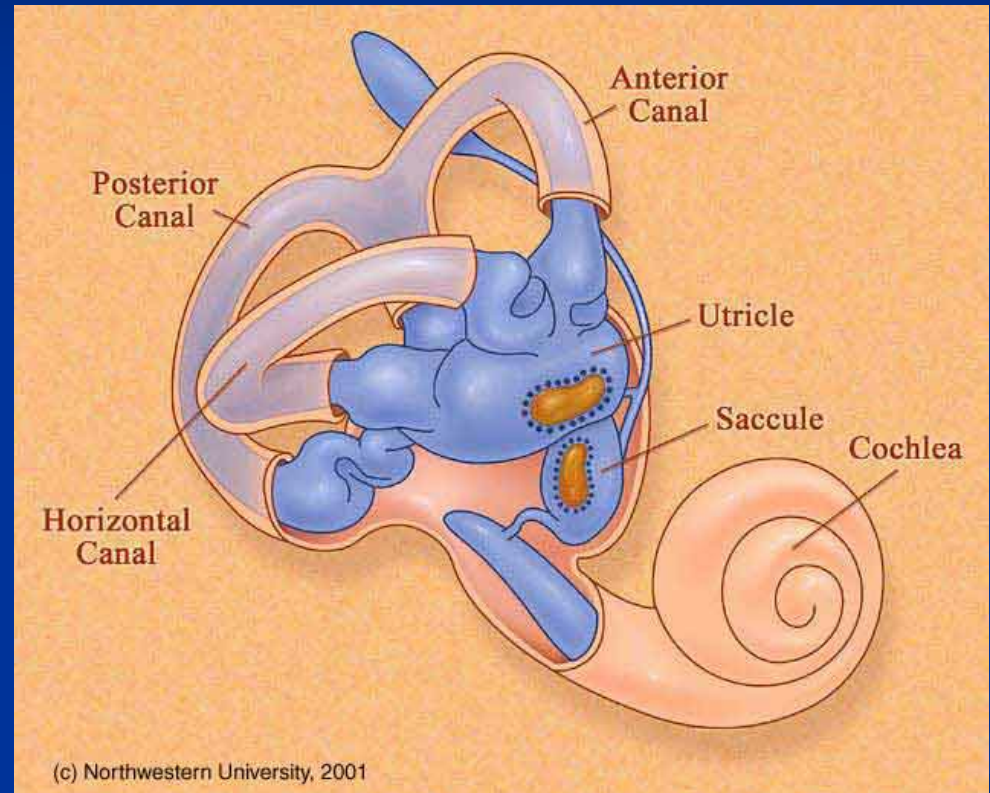
- 直線運動

  - Utricle: 水平面

  - Saccule: 垂直面

- 旋轉運動

  - 半規管



# 中樞前庭系統

Region just posterior to primary somatic sensory cortex, near face representation (also to area 3a within S1)

Cerebrum

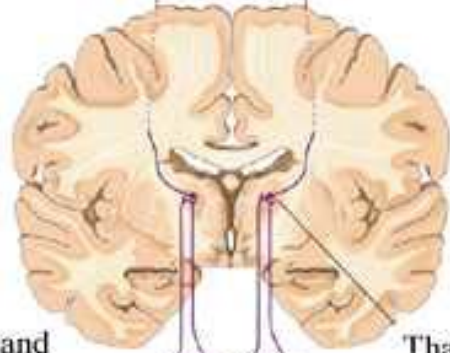
Muscle and cutaneous afferents

Rostral medulla

Thalamus (VP complex)

Vestibular nucleus

Vestibular nucleus





# 常見眩暈疾病

- 分成周邊性與中樞性

# 常見眩暈疾病

## ■ 周邊性

良性陣發性姿勢性眩暈 (BPPV)

美尼爾氏症 (Meniere disease)

前庭神經炎 (Vestibular neuronitis)

迷路炎

耳部帶狀皰疹

耳毒性藥物後遺症

# 常見眩暈疾病

## ■ 中樞性

基底動脈偏頭痛

中風: 小腦 腦幹

小腦橋腦腳腫瘤

頸椎基底動脈循環不全

頸性眩暈

# 眩暈病患的處理

- 病史詢問
  - 第一次
  - 誘發因素
  - 持續時間
  - 發作頻率
  - 減輕/加重因素

# 眩暈病患的處理

- 相關症狀
  - 耳症狀
  - 聽力喪失 耳鳴 耳悶
  - 頭痛 噁心 嘔吐
- 過去病史
  - DM HTN CAD
  - 高血脂
- 家族史

# 檢查

- 理學檢查
  - 耳局部檢查
  - 12對腦神經
  - 小腦
    - Romberg, Tandem gait,
    - Finger-nose-finger
  - 眼振: Frenzel glasses
  - 下觀察
- 實驗室
  - Hb, TG, Cholesterol
  - Sugar, STS
- x光
  - 內聽道 乳突 頸椎
- 耳鼻喉特殊
  - ENG/VNG, Caloric test
  - ABR
  - 聽力
  - 重心動搖 Posturography

# 急性眩暈病患處置

## ■ 分辨中樞性眩暈

明顯神經症狀

口齒不清 複視

無明顯神經症狀

眩暈超過24小時

嘔吐超過24小時

Ataxia

眼振:

多向性或垂直性

超過24小時

## ■ 症狀減輕

Antiemetics

Vestibular suppression

Valium

止暈 鎮靜

會掩蓋神經症狀

Sodium bicarbonate iv

無鎮靜效果

臥床休息

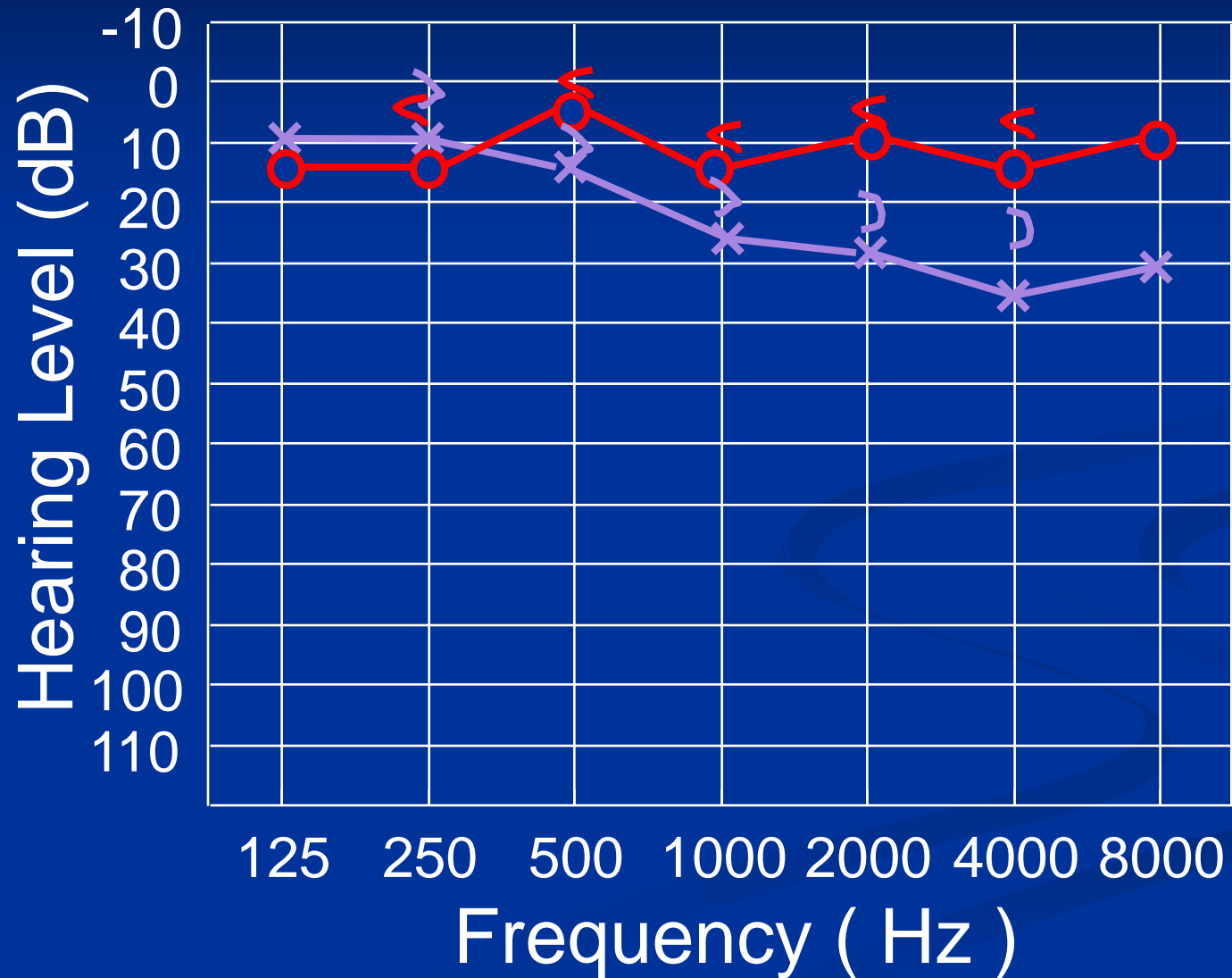
# 眩暈病患處置

急性期後

- 還有一點暈
- 安排檢查
- 針對病因治療
- 鼓勵下床行動: 前庭復健

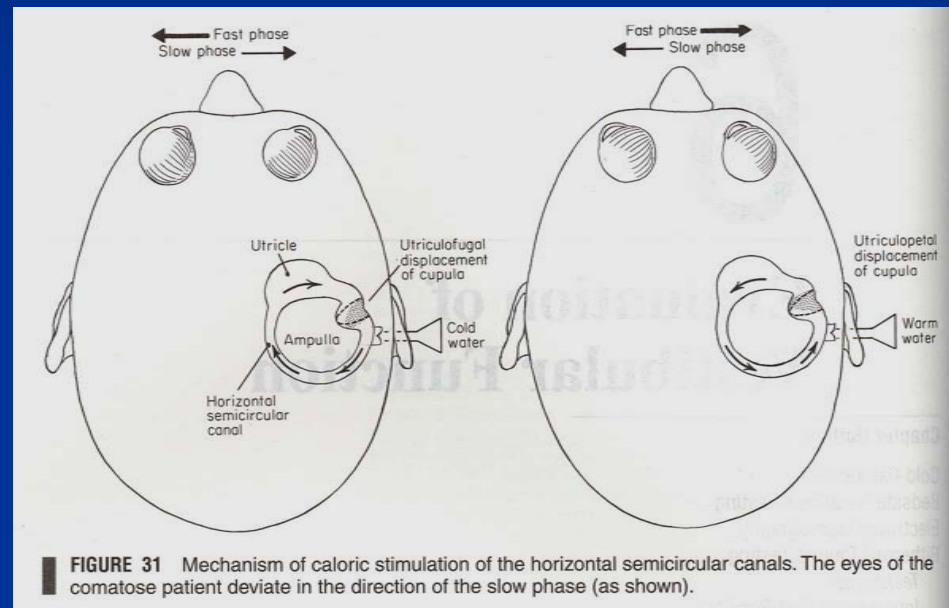


# Audiometry



# Caloric test--COWS

- The **c**old stimulus causes nystagmus to the **o**pposite direction
- The **w**arm stimulus causes nystagmus to the **s**ame direction

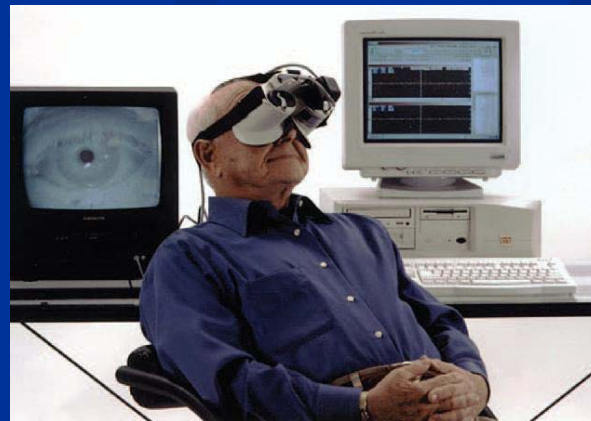


# ENG/VNG

- Electroneystagmography, Videoneystagmography
- Positional tests

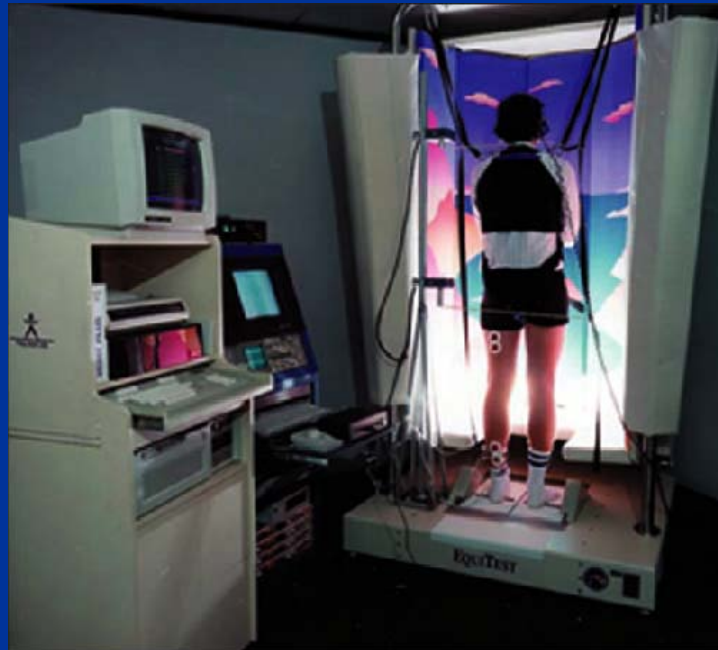
Oculomotor test (gaze, saccade, pursuit, optokinetics)

Caloric test



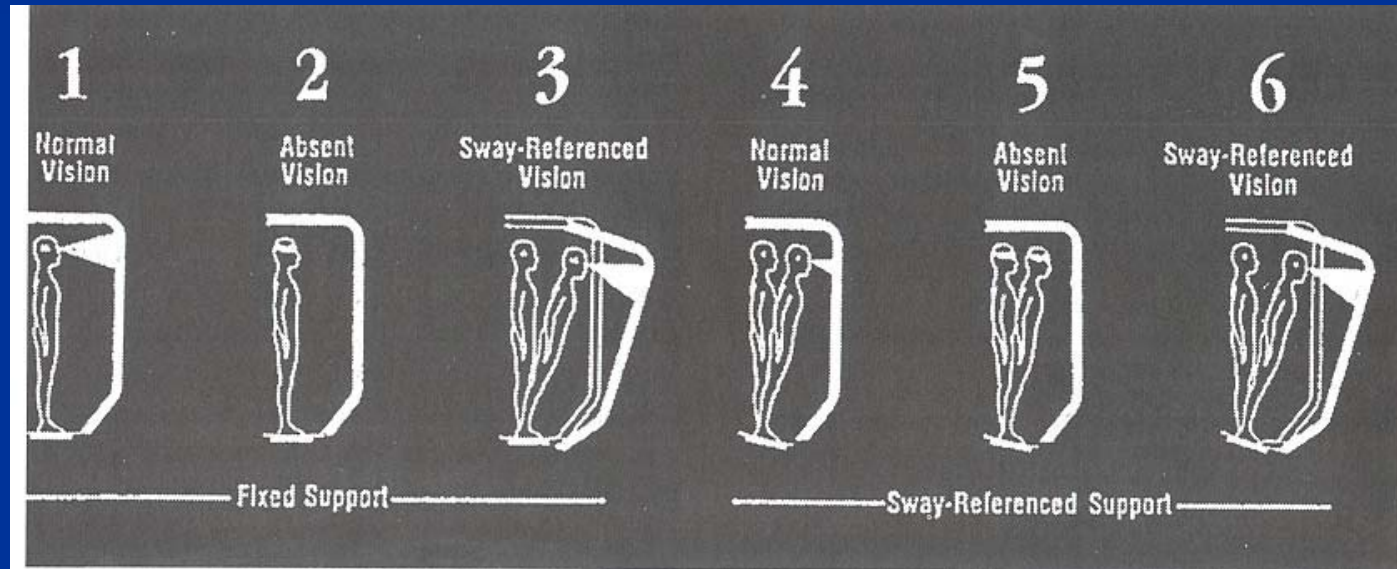
# Posturography

- Measure patient's ability to maintain an upright posture
- Useful in vestibular rehabilitation programs



# Dynamic Posturography

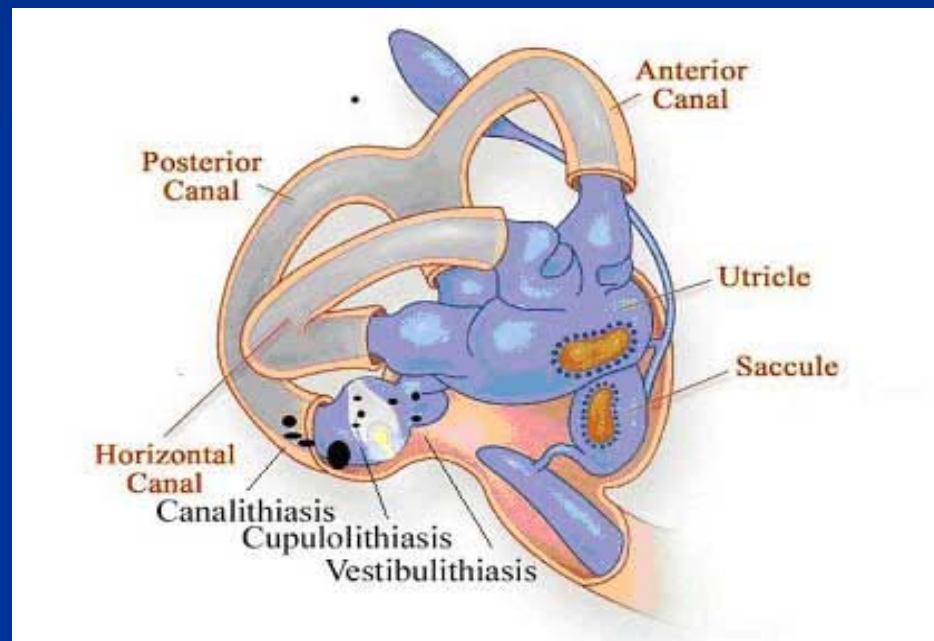
- Conditions Tested:



# 良性陣發性姿勢性眩暈

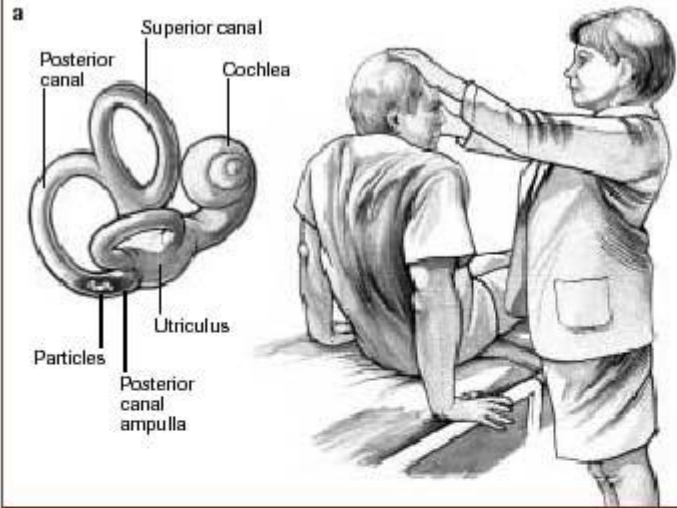
## Benign Paroxysmal Positional Vertigo

- 起床或躺下時有強烈旋轉的感覺
- 延遲現象: 姿勢改變後0.5-10秒發生
- 眩暈不超過一分鐘
- 重複動作眩暈減弱
- 迴旋性眼振

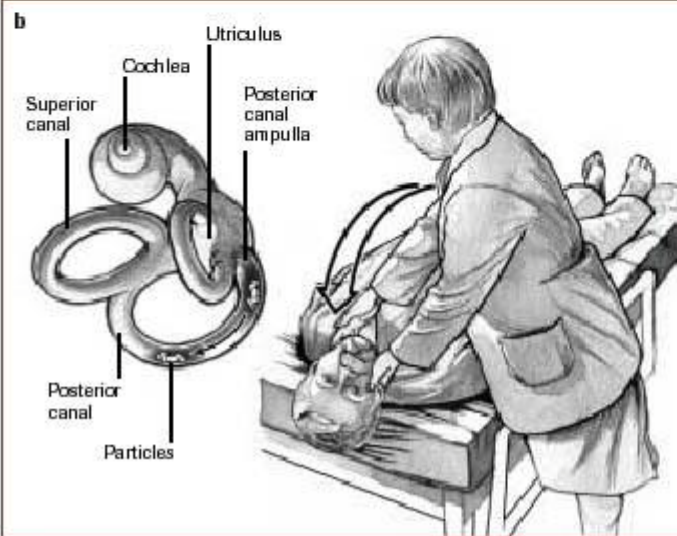


耳石症

FIGURE 1

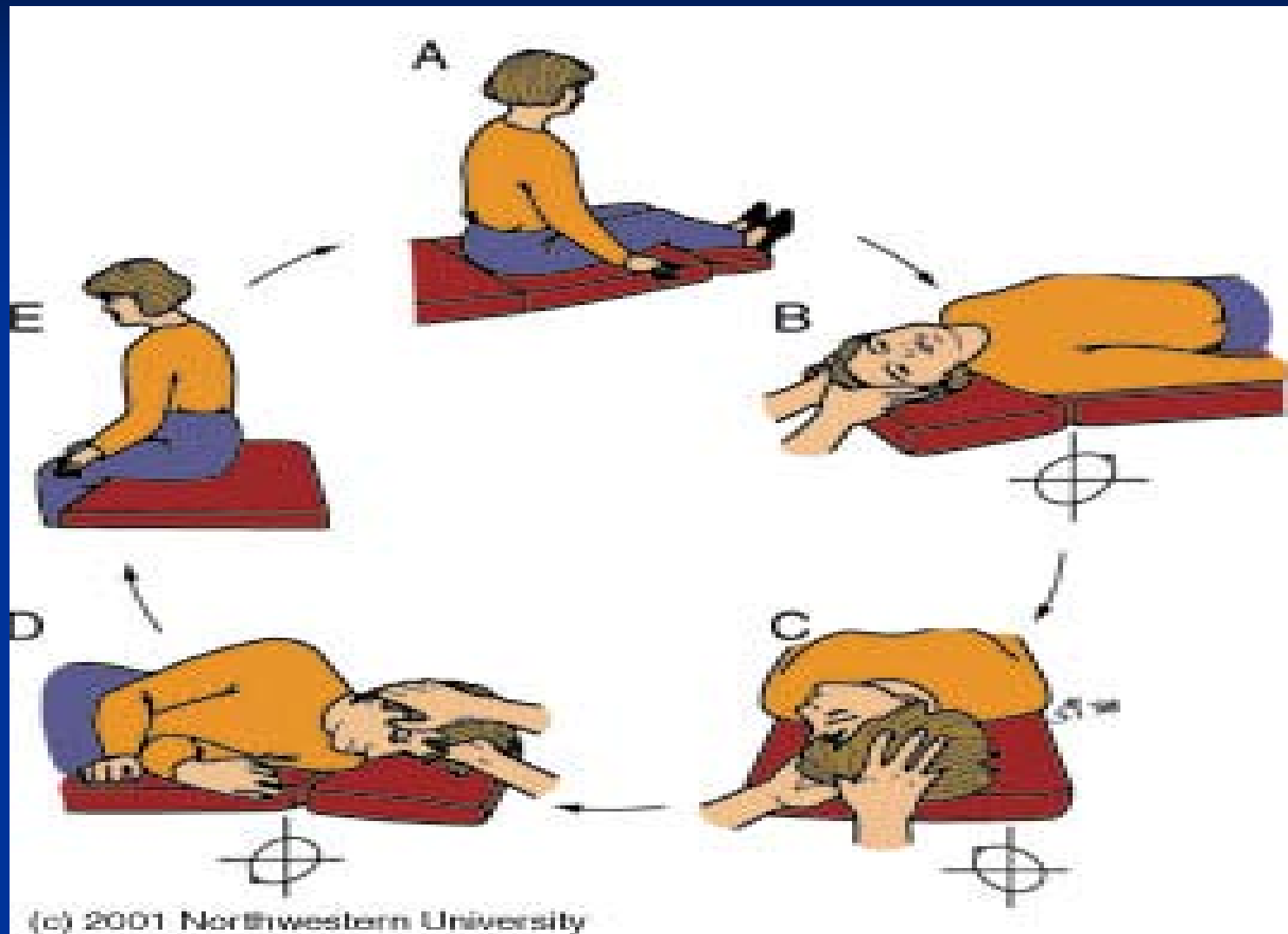


The Dix-Hallpike maneuver is used to confirm the diagnosis of benign paroxysmal positional vertigo by eliciting nystagmus and vertigo. The physician stands at the patient's right side and turns the head 45 degrees to the right (a).



After lowering the patient to the examining table while keeping the patient's head rotated 45 degrees, the physician notes whether nystagmus and vertigo are produced (b). The maneuver is then repeated on the patient's left side, with the head rotated 45 degrees to the left, to test the other ear. The presumed location of the loose particles causing the symptoms is shown in the anatomic figures on the left of the panels.

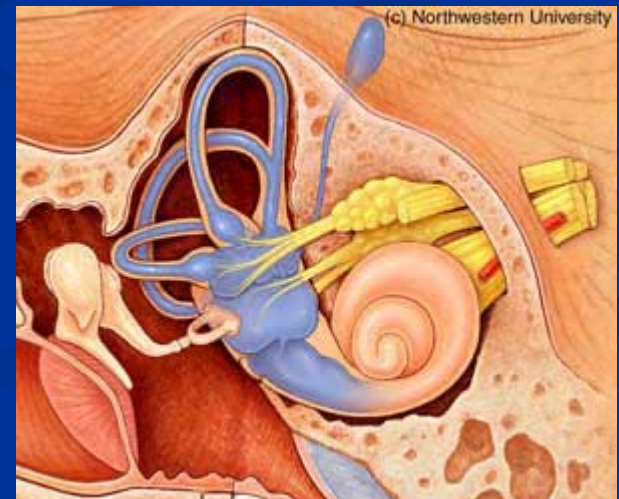
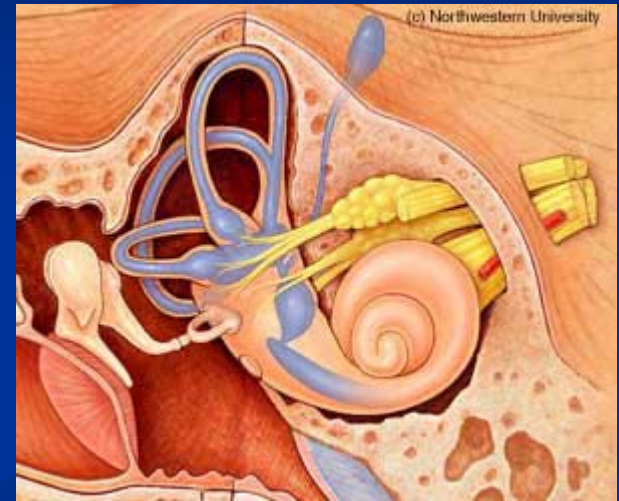
# 耳石復位術 Epley Maneuver





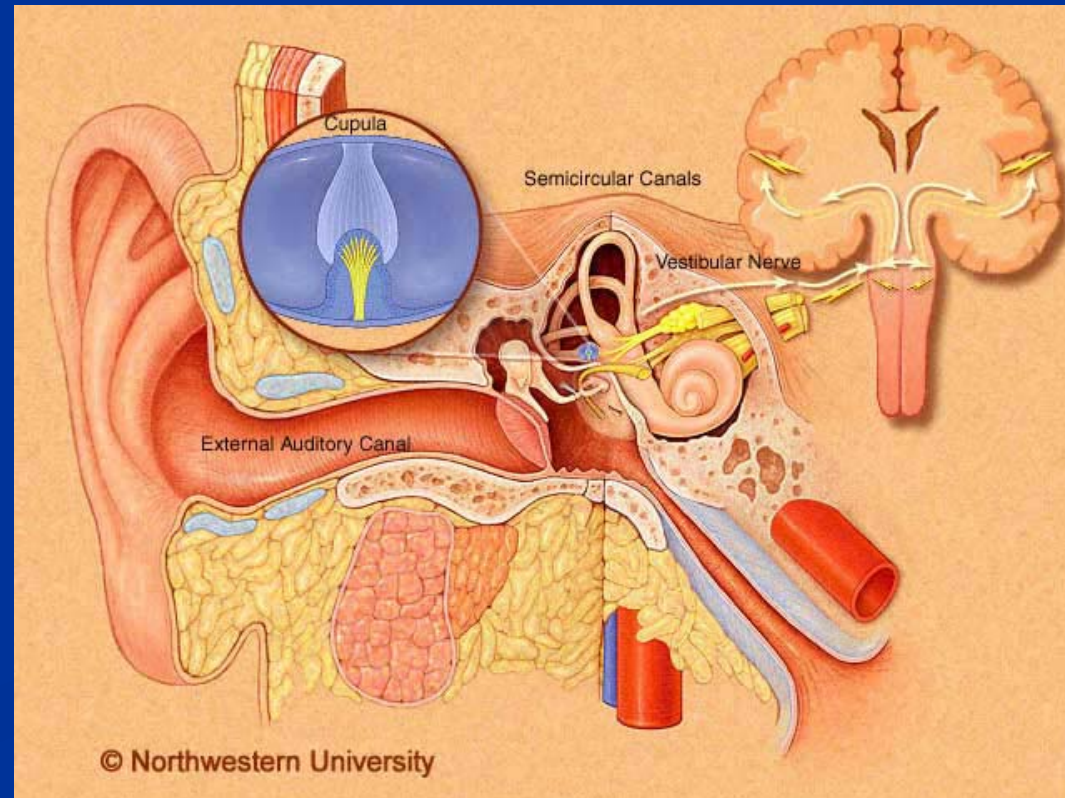
# 美尼爾式症

- 內淋巴水腫
- 聽力時好時壞
- 耳鳴
- 耳悶塞感
- 眩暈
- 瞬間幾乎要昏倒感  
Otolith crisis
- 利尿劑



# 前庭神經炎

- 前庭神經發炎
- 急性眩暈持續一至數日
- 強烈單向眼振
- 溫差試驗無反應
- 最近感冒病史



# Herpes Zoster Oticus

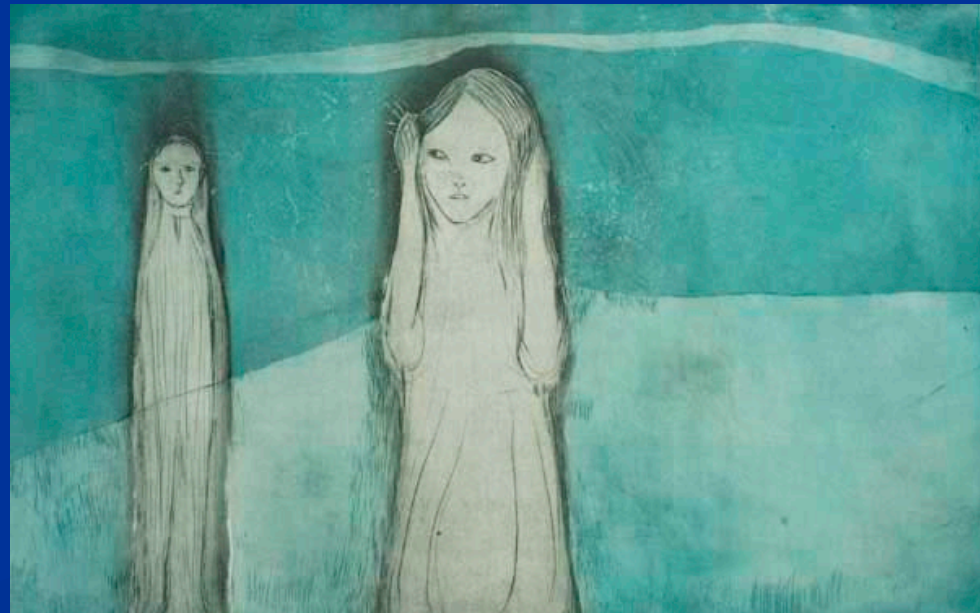
## 耳部帶狀皰疹

- 水痘病毒
- 顏面神經麻痺
- 眩暈
- 抗病毒藥治療: acyclovir, valacyclovir



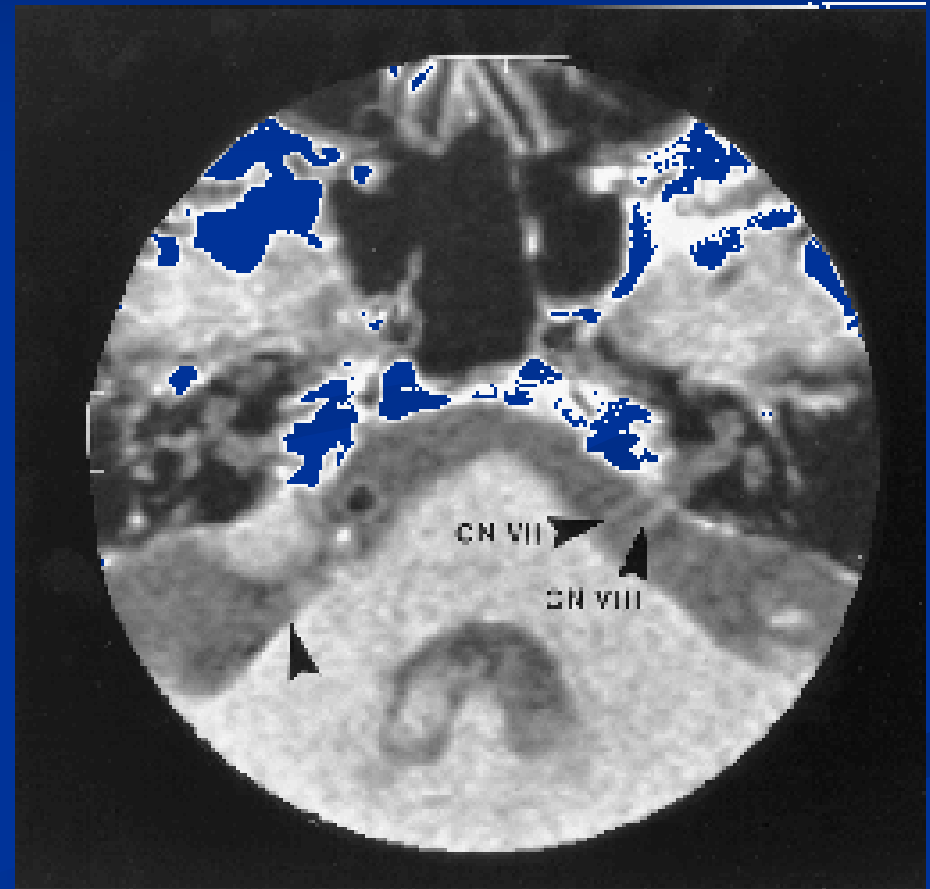
# 基底動脈偏頭痛

- 基底動脈收縮—擴張
- 症狀常不超過24小時
- 頭痛
- 眩暈
- 前兆 Aura
- 女性
- 柑橘類 乳酪



# 聽神經瘤

- 內聽道 小腦橋腦腳
- 前庭神經長出
- 漸進性聽力喪失
- 眩暈
- 腦幹症狀



# 眩暈處置要點

- 周邊性眩暈絕大部分可由腦部代償
- 區分出危險的狀況
  - 中風 腫瘤
- 急性期止暈
- 早期下床復健