The Dizzy Patient

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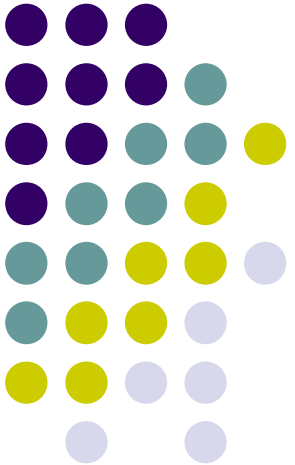
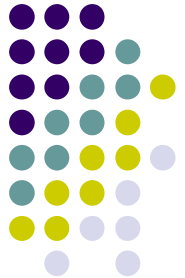


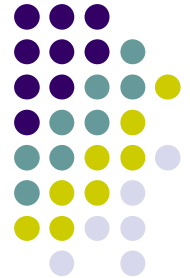
Session aims



- How to approach a common problem
- Simplify neuro signs in dizzy pt.s
- Understand red flag signs and Sx

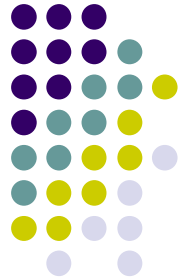
Ballarat Health Services
Putting your health first

Traditional approach to history taking



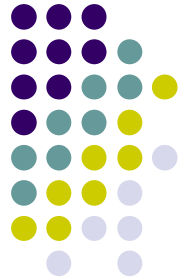
- First don’t pick up the patient
- If you have to, try & define difference b/n:
  - Dizzy, woozy or wobbly
  - Faint, presyncopal, syncopal, lightheaded
  - Anxious, panic attack, hyperventilation
  - Drowsy, drugged, dopey
  - Unsteady, unbalanced, “floating”
  - Depersonalisation, derealisation, disequilibrium

History - simplified



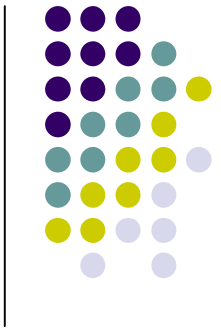
- LOC is a different problem
  - Presyncope as well?
- Severe headache takes priority
- Dizzines is true vertigo or not vertigo
- If there is vertigo, need to know (only!):
  - Other CNS symptoms & duration
  - Whether it is positional
  - Hearing loss +/- tinnitus +/- URTI Sx

History - not as difficult as it seems!



- Any severe headache or LOC is greater priority
  - Consider seizures, ICH, cardiac problems
- Define vertigo versus presyncopal feeling
  - Presyncopal or ill-defined = Rx as syncopal
    - Consider blood loss, cardiac prob.s, postural ↓BP
- True vertigo
  - Duration of symptoms?
  - Any other neurological symptoms?
  - Assess postural component?
  - Direction of ‘spin’, which side of lean/falls?

Assessment - vertigo



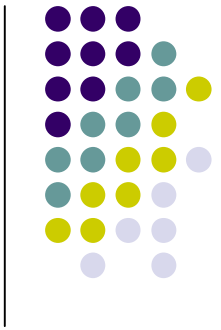
- The aim of assessment is to differentiate:
  - Peripheral lesions (inner ear and CN VIII)
    - BPPV, vestibular neuronitis, labyrinthitis, Meniere's
  - Central lesions (CNS)
    - Toxicological, stroke (cerebellar or brainstem)

causes

CENTRAL
-stroke (cerebellar, brainstem)
-drug toxicity
-vertebral dissection
-MS
-tumour

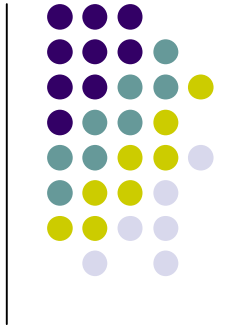
PERIPHERAL
-BPPV
-vestibular neuronitis/labyrinthitis
-Meniere's
-acoustic neuroma
-other infections (suppurative)
-ototoxicity

True vertigo



- Other neurological Sx? Assess duration:
  - brief = possible TIA
  - constant = probable central vertigo
- Positional?
  - With sudden head movements BPPV very likely
- hearing loss? Tinnitus? URTI Sx?
  - Normal hearing suggest vestibular neuronitis
  - Hearing prob.s& no tinnitus = acoustic neuroma TPO
  - Recent URTI/otitis media = bacterial labyrinthitis
  - Tinnitus and hearing prob.s = Meniere's

Vertigo - history

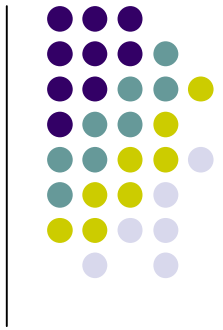


PERIPHERAL
-more severe
-more likely if:
-N/V/sweaty
-tinnitus or hearing problems
-photophobia
-usually sudden onset
-paroxysmal/intermittent
-aggravated by position

CENTRAL
-less severe
-more likely if:
-other neuro signs &Sx

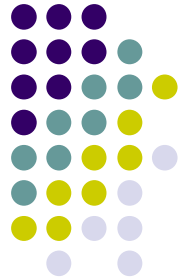
-may be slow onset
-usually constant
-variable degree of positional component

examination



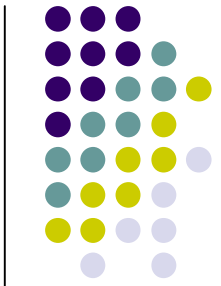
- General examination
- CN’s – central causes likely involve others
- Ears – looking for infection, perforation, vesicles
- Any signs are caused by ipsilateral lesions

Examination – Hallpikemaneuvre



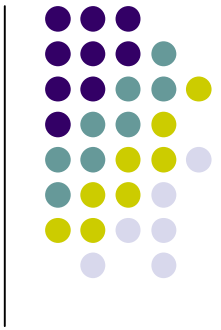
- Starts sitting up
- Patient lies back quickly
- Head to 30° below horizontal
- Rotated 30° to one side
- Keeping eyes open is very important

Hallpike - 2



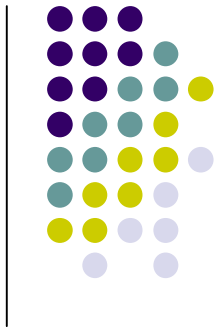
- Positive = short latent period, rotatory, towards affected side, ease off, then refractory
- Confirms diagnosis of BPV
- (Ipsilateral lesions are detected
- Central lesions = instant nystagmus, non-fatiguing, multi-directional, lasts longer, may be more mild, no ‘habituation’

BPPV



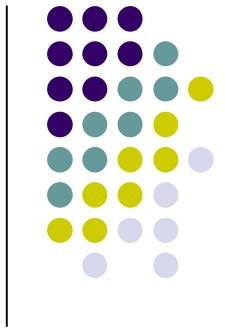
- What it means:
  - Benign (not dangerous)
  - Paroxysmal (eases off after moving head)
  - Positional (head movement brings on Sx)
  - Vertigo (the room spins)
- Episodic, clear exacerbations (eg. rolling over in bed), +/- related to URTI/surgery/trauma
- Self resolves, treated with Epleymaneuvre

Vestibular Neuronitis



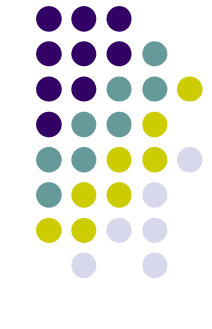
- (Labyrinthitis = with hearing affected)
- Onset usually hours, resolves over days
- Following flu-like illness, sometimes otitis or meningealinfecion
- Episodic exacerbations (HSV? Zoster?)
- Prominent nystagmus, positive Hallpike

Meniere's disease



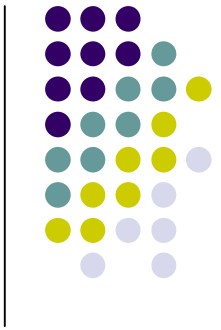
- Most commonly >middle-aged men
- =decreased endolymph
- Episodes 30/60 to 24 hours
- Prominent N,V & sweaty
- Horizontal nystagmus, positive Hallpike
- Hearing loss +/- tinnitus

‘worrying’ peripheral causes



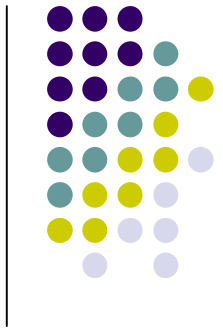
- Acoustic neuroma
  - Schwannoma on vestibular nerve
  - Unilateral hearing loss
  - Not likely episodic hearing vertigo
  - Commonly imbalance etc.
- Suppurative infections
  - Should be F, meningism or abnormal ENT exam

investigations



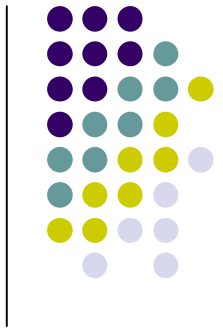
- Ill-defined dizziness/pre-syncope
  - ECG definitely & consider monitoring
  - Consider bloods (U&E.s, Hb, ?WCC)
- Imaging
  - CT brain is to rule out bleeding
  - MRI better images the brainstem

management



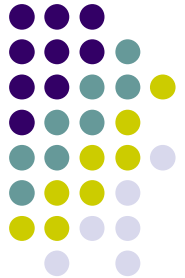
- Treatment is generally with the same drugs
- Disposition in peripheral depends on severity & social supports (more than response to Rx)
  - Nausea is a very disabling symptom!
- Suspected central causes are usu. Admitted to facilitate investigation
- The modified Epleymaneuvre is for BPPV
  - Can be tried in chronic +/- psychiatric

Treatment - medications



- Same regardless of cause?
- Main options:
  - Prochlorperazine 12.5mg im/iv, 5-10mg oral tds
  - Betahistine 16mg tds
- Other possibilities:
  - Diazepam iv, antihistamines, anticholinergics, CCB
- Strongly consider iv fluids in ED
  - above drugs can vasodilate& cause hypotension
  - Patients often vomiting and anorexic

referrals



- ENT for any suspected bacterial labyrinthitis, Menierre's, perilymph fistula
- Neurologists are useful for diagnostic dilemmas, central vertigo Ix and Rx