

45 Vestibular labyrinthine physiology

- A The utricular macula responds to angular acceleration.
- B Bithermal caloric responses are abolished in conditions of zero gravity.
- C Ampullofugal displacement of the cupula of the superior semicircular canal increases vestibular nerve activity.
- D The saccular maculae lie in a horizontal plane.
- E Steady rotation is detected by the semicircular canals.

46 Vestibular function tests

- A In the bithermal caloric test the ears are irrigated for 40 s with water, 5° Celsius above and below normal body temperature.
- B Rotation to the left indicates a labyrinthine disorder on the ipsilateral side during Unterberger's test.
- C In gait tests the subject tends to deviate to the affected side.
- D An abnormal optokinetic nystagmus usually indicates a central vestibular problem.
- E Doll's head eye movements are lost with lesions of the basal ganglia.

47 Bithermal caloric test

- A The fixation index compares the duration of nystagmus with and without optic fixation.
- B Decreased responses always indicate pathology.
- C Enhanced responses may be seen in cerebellar lesions.
- D Frenzel's glasses abolish optic fixation.
- E Water is introduced into the ear using a Dundas Grant coiled copper tube.