

Jane is aged 25. She noticed double vision last week, especially when looking to the left. In retrospect, she has been aware of slight headaches, especially in the mornings, for 3 months. The headache worsens if she coughs, when she also sometimes notices a brief darkening of her vision.

She has gained 10 kg in weight in the last year.

Examination confirms double vision on left gaze, with limited outward movement (abduction) of the left eye. Ophthalmoscopy finds swelling of the optic disc bilaterally, with blurred disc margins. Visual acuity is normal in both eyes.

1. What is the optic disc, and of what cellular structures is it composed?

2. When assessing the visual fields how do we refer to the optic disc? What effect would swelling of the optic disc have on a subject's visual field?

3. Swelling, anywhere in the body, can occur by increased fluid pressure or through cellular damage (inflammation). Which type is logically more likely here?

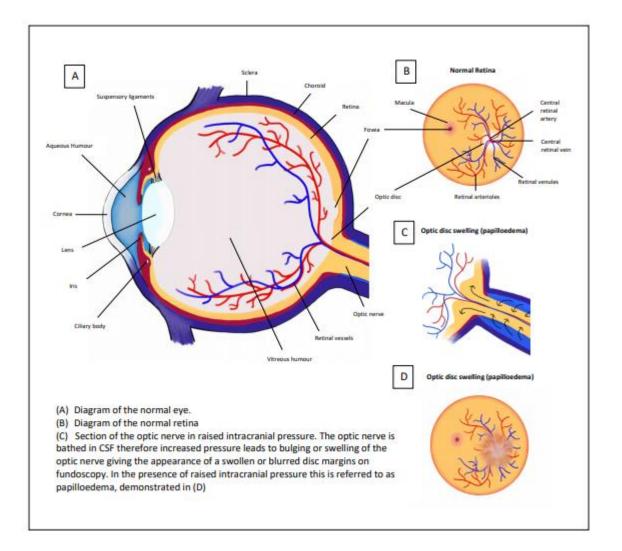
4. Why does double vision occur?

5. Which muscle and nerve are responsible for turning the eye outward? What is special about the nerve? Describe its pathway.

6. How is cerebrospinal fluid pressure usually measured, and what factors might affect CSF pressure? What do you expect the CSF pressure to be here? Are there any reasons why CFS pressure ought not to be measured in the usual way?

7. What does the word 'idiopathic' mean in general? What is the origin of the word?





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