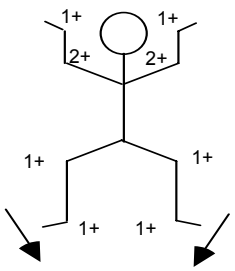
Case 6: HOMONYMOUS HEMIANOPSIA (Slide CC6-1)

Chief Complaint: The patient is a 54 year old man with mitral valve disease who presented to an ophthalmologist with "trouble seeing with my right eye."

History of Present Illness/Past Medical History: The patient has a history of hypertension and rheumatic fever as a child. Eight years ago he had increasing shortness of breath and was diagnosed with mitral valve stenosis due to rheumatic heart disease and he underwent surgery in which he received a mechanical mitral valve. Since that time he was on coumadin anticoagulation to prevent clot formation on the artificial valve. Three months ago, his prescription for coumadin ran out and he was too busy lately to get it refilled. Three or four weeks ago, while he was shaving one morning, he suddenly noticed that he was having trouble seeing the right side of his face in the mirror. Looking around the room, he had trouble seeing everything on his right side. He did not have any weakness, light-headedness, headache, or other symptoms. He therefore made an appointment to see an ophthalmologist.

Physical Examination: Well developed middle aged man in NAD.
T=98.7, P=84, BP=150/90, RR=16
Neck- supple. Lungs- clear. Cardiac- RR, mechanical systolic click, no m/g/r.
Abd- nl. Ext- no edema.
Neuro- Mental status: A&O x 3, normal speech and memory.
CN:PERRL, EOMI, no nystagmus.
Ophthalmoscopic exam- normal vessels, normal optic discs.
Visual acuity (without glasses): Right eye: 20/100. Left eye: 20/200.
Visual fields: testing each eye separately, the entire right half of the visual field could not be seen, with **no macular sparing** (i.e. **dense right homonymous hemianopsia**).
Face symmetric, with normal sensation. Hearing nl.
Palate and tongue - midline. Sternomastoid strength-normal.
Motor: Normal muscle bulk and tone. 5/5 strength throughout.
Reflexes: Coord/Gait:nl RAM, FNF, heel-shin. Gait-nl.
Sensory: nl. to touch, pinprick, temp. and joint position sense.



Questions:

1. Review the visual field deficits resulting from lesions at different sites along the visual pathway (Slide B-10). Where could the lesion be in our patient?

2. Given our patient's history what is the most likely cause of his deficit?