CASE BASED LEARNING

Learning Objectives:

- Identify the clinical signs & symptoms of raised intracranial pressure.
- Correlate the clinical feature with the MRI finding.
- Determine the type of lesion, primary or secondary.

Fifty eight year old gentleman consulted a neurosurgeon for gait instability and frequent falls for the last 3 months. He said that while walking he reeled towards one side and would trip over an uneven surface. Lately he has started having headaches, which was rather diffuse, at times severe and was associated with projectile vomiting. For the past 2 years he has been having productive cough and has lost weight since then. On examination, he was oriented; speech was dysarthric with an ataxic gait. Fundi showed bilateral papilloedema. Finger to nose in coordination was also noted. The consultant immediately advised for an MRI Brain. Two days later the patient returned with the imaging. The MRI brain showed a well circumscribed lesion within the cerebellum which showed a low intensity signal on T1 weighted image, it appeared hyper intense on T2 weighted image. It was surrounded by edema causing compression of the fourth ventricle giving rise to obstructive hydrocephalous. The consultant advised him an urgent admission.

Questions

1. Why did this patient have headache and vomiting?
2. Can you think of a likely cause If an elderly patient with ataxia develops hydrocephalous?
3. What is hydrocephalus?
4. What is the difference between a communicating and a non communicating hydrocephalus?
5. Does the patient need to be further investigated?
6. Is there a correlation between the two year history of productive cough and this lesion?
7. Can you think of a possible test with which you can arrive at a final diagnosis?
8. If this is a secondary lesion then can you innumerate the primary lesions metastasizing within the brain?
9. Why did the neurosurgeon admit the patient?