VISUAL BALANCE DISORDERS

Visual Midline Shift Syndrome

- Visual Midline Shift Syndrome (VMSS) results from dysfunction of the ambient visual process. It is caused by distortions of the spatial system causing individuals to misperceive their position in their spatial environment. This causes a shift in their concept of their perceived visual midline. This will frequently cause the person to lean to one side, forward and/or backward. It can frequently occur in conjunction with individuals that have had a paralysis to one side. By using specially designed yoked prisms, the midline is shifted to a more centered position thereby enabling individuals to frequently begin weight bearing on their affected side. This works very effectively in conjunction with physical and occupational therapy attempting to rehabilitate weight bearing for ambulation.

Visual Hallucinations

- Visual hallucinations may occur both as formed objects like stars or other recognizable objects, or may be unformed as in flashes and spots. The formed images may represent misunderstanding of information in the brain or background “noise” from the disruption of brain tissue that is needed to process the information.

- A separate but related cause of visual hallucinations is called Charles Bonnet Syndrome. It occurs in patients with significant loss of vision. The hallucinations from Charles Bonnet Syndrome are often very detailed, such as a group of people, a truck or an animal. These are not psychotic in nature but simply represent the brain’s attempt to interpret the impaired information and find a mental image to match the incoming message.

Visual Neglect - Visual Imperception

- Cerebral injury from stroke or other trauma may cause visual imperception. It is a passive, unconscious decreased awareness of part of the field of view or other stimuli to one side of the body. It usually occurs with a visual field defect, but may occur without loss of field.
A person without visual imperception, but with a visual field loss would still be aware of the area of loss and be more likely to make compensations. A person with both visual field loss and visual imperception would unconsciously neglect the area of the field loss and thus be less likely to compensate for the defect.

- The treatment of visual imperception is still limited. It begins with teaching the patient to be aware of the neglected side often through occupational therapy. If the patient has a visual field defect, visual field awareness prism may be beneficial, followed by intense occupational therapy.