Sphenoid wing meningioma clinical features

Tumors growing in the inner wing (clinoidal) most often cause direct damage to the optic nerve leading especially to a decrease in visual acuity, progressive loss of color vision, defects in the field of vision (especially cecocentral), and an afferent pupillary defect.

If the tumor continues to grow and push on the optic nerve, all vision will be lost in that eye as the nerve atrophies.

Proptosis, or anterior displacement of the eye, and palpebral swelling may also occur when the tumor impinges on the cavernous sinus by blocking venous return and leading to congestion. Damage to cranial nerves in the cavernous sinus leads to diplopia.

The ophthalmic nerve (is often the first affected, leading to diplopia with lateral gaze. The patient will have pain and altered sensation over the front and top of the head.

Horner syndrome may occur if nearby sympathetic fibers are involved.

Endocrine testing is important because pituitary insufficiency has been reported to occur in 22% of patients with anterior skull base meningiomas, including thyroid stimulating hormone (TSH), follicle-stimulating hormone (FSH), and luteinizing hormone (LH).