Optic Nerve Pit

What is optic nerve pit?

An optic nerve pit is a small pocket adjacent to the optic nerve. A minute amount of the tissue of the retina protrudes backwards through that defect. This is a condition that the child is born with. It usually occurs in one eye only, however in 15% of children it may be seen in both eyes.

How is optic pit diagnosed?

If the pit is not affecting vision, the patient will have no symptoms and will not complain. It is discovered on routine examination. Most cases are diagnosed by fundus examination using the slit lamp or indirect ophthalmoscope. If the pit affects the vision, further examination techniques may be used like fluorescein angiography of the retina or OCT.

What is the effect of optic pit on vision?

The pit itself does not affect vision and most patients remain without any symptoms for decades. About 50% of patients start feeling vision deterioration in their 20’s or 30’s. It is very uncommon for a child with optic pit to get a visual problem in childhood. Defect in vision occurs due to accumulation of fluid under central part of the retina (the macula). Even with appropriate treatment, vision may not return to normal.

What is the treatment of optic pit?

There is not treatment required for the optic pit itself, and there is no preventive measure to avoid the accumulation of fluid and the associated diminution of vision. Treatment only starts after the fluid accumulates. In some cases, the fluid disappears spontaneously without treatment. In such cases the doctor may require the patient to limit activity for some time and to come for frequent follow up visits. In other cases surgery (called vitrectomy) may be required to clear the fluid.