

CENTRAL RETINAL ARTERY OCCLUSION

Central retinal artery is the main artery supplying blood to the eyes. Any blockage of the central retinal artery or its branch may impair blood flow to the eye resulting in damage to the retina. The retina is that part of eye where the image gets portrayed and any damage to it will result in impairment of vision. This condition may cause sudden onset of impairment of vision, which mainly affects one eye.

INCIDENCE

Central retinal artery occlusion is an infrequent condition which may affect individuals in any age group. However older adults seem to be more susceptible to it. It is more frequently seen in men as compared with women.

SIGNS AND SYMPTOMS

The occlusion of the central retinal artery may cause sudden and drastic loss of vision which is typically painless. The individual may give a history of prior episodes of transient loss of vision.

DIAGNOSIS

The eye specialist will conduct a detailed eye examination which may reveal diminished light perception in the affected eye. Though this condition is mainly unilateral, however in occasional instances, both eyes may be simultaneously affected.

The eye specialist will perform fundoscopy wherein the characteristic retinal findings may be evident. Characteristic finding on fundoscopy is a pale fundus with a cherry red spot in centre. Other investigation like fluorescein angiography may be done if there seems to be a doubt in diagnosis. Carotid ultrasonography or ECHO may be needed to diagnose the source of embolus.

CAUSES AND PREVENTION

The most common cause of blockage of the central retinal artery is thrombus formation or an embolus which has travelled up to this artery. This thrombus/embolus formation may result from atheroma, inflammation of the heart valves or high cholesterol in blood or smoking. A rare condition known by name of giant cell arteritis may also cause occlusion in central retinal artery and characteristically affects both eyes simultaneously.

COMPLICATIONS

The retina of the eye may get irreversibly damaged if its blood supply remains impaired for more than 2 hours. Retinal damage results in profound loss of vision in the affected eye. Another eye condition, by the name of glaucoma may also develop in the future.

TREATMENT

The central retinal artery occlusion should be urgently taken care of since it may cause irreversible retinal damage and permanent blindness in one eye, if not treated timely. The specialist may prescribe some eye drops which may reduce the intraocular pressure and prevent further complications. Moreover medications like thrombolytic drugs may also be prescribed to resolve the thrombus in the retinal artery. High dose steroids may be helpful in individuals who have giant cell arteritis to reduce inflammation and swelling of the blood vessels.