

DEFINITION

1. The retina of the eye consists of two layers - the retina proper and the pigmentary epithelium - which normally lie in apposition.
2. If these two layers become separated, the event is described as a **detachment of the retina**.

TYPES

3. **Simple detachment** - when the separation occurs as a result of a hole appearing in the retina proper. In this condition, the state of the retina is of primary importance.
4. **Secondary detachment** - this being an event subsidiary to other happenings in the eye when -
 - 4.1. the retina is pushed away from its bed by an accumulation of fluid (as in choroidal haemorrhage, exudative choroiditis, retinopathy, angiomas and toxæmia of pregnancy) or by neoplasm
 - 4.2. the retina is pulled away from its bed by the contraction of fibrous tissue in the vitreous, such as occurs in plastic cyclitis, proliferative retinopathy or retrolental fibroplasia.

CLINICAL MANIFESTATIONS

5. **Simple detachment**, if small and on the periphery, may not give rise to any symptoms. With larger detachments, early symptoms may be transient flashes of light in a particular part of the visual field and the appearance of floating opacities in the line of vision. As the detachment develops, it seems to the patient as if a curtain is descending (or ascending, if the detachment started above) and central vision is abruptly lost if the detachment spreads across the macular area. The area in which vision is depressed or lost is known as a scotoma and can be determined by making a chart of the field of vision.
6. In **secondary detachment**, the symptoms and signs are those of the underlying condition.

AETIOLOGY

SIMPLE DETACHMENT

7. It is probable that simple detachment of the retina is always due to the formation of a hole in the retina which allows fluid from the vitreous to seep through and raise the retina from its bed. If the vitreous gel is healthy and solid, such a detachment rarely occurs. Where, however, the vitreous is fluid or adherent to the retina, a detachment readily occurs.

8. Holes or tears in the retina generally occur in degenerate patches at the retinal periphery. Such degenerate patches tend to adhere to the overlying vitreous and are most commonly found in the attenuated retina of an elongated myopic eye. They may also occur in **senile macular degeneration and retinitis pigmentosa**, and as a sequel to **choroiditis**.
9. The tear is usually initiated by trauma which, if the retina is sufficiently degenerate, need be no more than a slight shaking or even, if the vitreous is adherent to the retina, normal movements of the eye, which cause the vitreous to drag on the area of the retina to which it is adherent - in such an event, the patient will not give a history of trauma.

SECONDARY DETACHMENT

10. In this condition, the detachment is an integral part of the underlying process and the aetiology is thus that of the underlying process.

CONCLUSION

11. Simple detachment results from trauma which, if the retina is normal, needs to be severe and direct to the eye but which, if the retina is severely degenerate, may only be slight. **Secondary detachment** may occur in a variety of primary eye conditions.

REFERENCES

Trevor-Roper Patrick D. Lecture Notes on Ophthalmology. 7th Ed. 1986. Oxford. Blackwell Scientific Publications. p65-69.

Miller Stephen J H. Parsons' Diseases of the Eye. 18th Ed. 1990. Edinburgh. Churchill Livingstone. p247-251.

March 1993