EPISCLERITIS AND SCLERITIS. I

Episcleritis and scleritis are two separate conditions not always distinguished by ophthalmologists.

Normal Vascular Arrangement (Fig. 1)

- (a) *Conjunctival plexus*.—The most superficial plexus of fine vessels movable over the underlying structures.
- (b) *Superficial episcleral plexus*.—A radially arranged plexus lying in the episcleral tissues.
- (c) *Deep episcleral plexus*.—A network lying deeply on the sclera.

(a) and (b) can be bleached with 1 : 1000 adrenaline while (c) cannot.

FIG. 1.—Normal vascular pattern.

Classification

Episcleritis (a) Nodular
 (b) Simple

Scleritis (a) Anterior

(b) Posterior

- (i) Nodular
- (ii) Diffuse
- (iii) Necrotizing

Episcleritis (Fig. 2)

Occurs at any age and affects both sexes equally. Sometimes associated with systemic diseases of an allergic nature (erythema nodosum, contact dermatitis, etc.). Often a family history of atopy. The patient may complain of pain confined to the eye. A variable area of episclera shows brick-red discolouration and mild watering and photophobia may occur. Laboratory investigations are seldom helpful.

FIG. 2.—Episcleritis.

Visual acuity is unaffected. On examination with red-free light the conjunctival and superficial plexuses are seen to be congested and the oedematous episclera separates superficial from unaffected deep plexus (Figs 2 and 3). In nodular episcleritis a localized nodule occurs which is movable over the sclera and does not undergo necrosis. The cornea and intra-ocular structures are not involved in episcleritis which never develops into scleritis.

The course is relatively acute and resolves within 3 weeks without scarring. A simple episcleritis often recurs as a nodular type and vice versa.

FIG. 3.—Episcleritis.

FIG. 4.—Scleritis.

FIG. 5.—Nodular scleritis.

FIG. 6.—Necrotizing scleritis.

Scleritis (Fig. 4)

A more serious condition which may lead to loss of the eye. Affects any age and systemic disease is often present (rheumatoid arthritis, polyarteritis nodosa, other collagen diseases, herpes zoster ophthalmicus). It usually presents with severe boring pain; malaise is common. The eye is injected and photophobia and watering are often present. Posterior scleritis may present with diplopia or proptosis.

Visual acuity may be diminished, particularly after repeated attacks. Examination with red-free light shows involvement of the deep episcleral plexus as well as the superficial (Fig. 4).

Nodular Scleritis (Fig. 5).—Confined to the sclera and therefore fixed. Nodules may be multiple.

Diffuse Scleritis.—Margins of scleral reaction are ill-defined and may be extensive ("brawny scleritis").

Necrotizing Scleritis (Fig. 6).—An avascular area appears leading to necrosis, sequestration, and sometimes perforation of the sclera (scleromalacia perforans).

Complications of Scleritis.—Uveitis, keratitis, glaucoma, macular oedema, complicated cataract, retinal detachment, perforation of the globe.

Illustrations:

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(To be concluded)

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