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History of ophthalmology

Strange physical treatments

Although surgery and therapeutics were practised to the limits of the period, the turn of the century ophthalmologist also relied heavily on a battery of physical treatments which have now disappeared.

Perhaps the least alarming of these was irrigation, albeit with esoteric substances – for example, extract of sheep adrenal, yellow psycyanin, and methyl violet (which by irretrievably staining bed linen must have caused many instances of doctor-nurse enmity).

Regarding invasive therapy, injection into the loose subconjunctival tissue was practised in America and Europe with varying enthusiasm. Subconjunctival salt was supposed to quicken the lymphatic circulation, yet the procedure was extremely painful, even when cocaine was added, and patient compliance may have been a reason for its abandonment.

Ocular massage, first proposed by Donders, was practised widely to aid blood and lymph flow. Mercifully, simple digital pressure was often held to be sufficient. But for resistant cases 'massage traumatique' involved everting the cocainised lid and massaging vigorously with a finger dipped in boracic acid, until free bleeding was seen. Mechanical destruction of tissue occurred and indeed was intended, on the same principle as the curetting of scar tissue. One author adds that . . . 'cold compresses may be applied if the patient be unduly sore afterwards'. Instrumental massage of the globe was also performed with a flat, spoon-like instrument and was supposed to ripen cataract. Taking this principle further, Malakow produced a device terminating in a small ivory ball which vibrated at 9000 times a minute and could be applied to the diseased globe.

Although this was marketed enthusiastically, many practitioners stuck with simple jets of water, as 'pressure is produced by the weight of the solution falling onto the eye'. Steam massage was effected by applying a paper funnel to the nozzle of the ward tea kettle. The patient was coaxed, with lids held open, to within about two

feet of the device and then progressively moved nearer. It is noted that astringents could be added to the kettle to medicate the steam, but presumably not while tea making was in progress! Heat was believed to cure deep inflammation, and poultices were very popular with the patients, although a simpler alternative was to direct steam jets onto dressings placed on the eye. For superficial inflammation 'cold' was prescribed, either in the form of a fish bladder filled with ice, or a Leiter coil made of metal tubing fed by a vessel filled with ice water.

For diplopia and neuralgia, electric current was thought to be beneficial. This was achieved by putting an electrode plate at the back of the patient's neck and a small anode on the closed lid. A current of about 3 milliamps was aimed for, and patients sometimes got 'unpleasant shocks' when the device was activated. Benedikt heroically reports using his own hand as electrode, to protect his patients from such surprises.

For ophthalmology, as for everything else, leeching was still advocated. Learning from recent advances in antisepsis, it is noted that only fresh, clean, and healthy leeches should be used. The latter was denoted by energetic contraction when grasped and a tendency to swim restlessly. Sluggish and apathetic leeches were not to be applied to patients as their drawing power was poor. Placing a rubber sheet with a small hole cut out over the patient's face spared him the sensation of the leech's wet body wriggling and of the trickle of blood. If the patient did not appear appetising, the leech could be tempted by a drop of sugared water, or of blood from the nurse's finger, applied to the temple.

It appears that the lot of the eye patient in the 1900s consisted of (clinically sanctified) humane remedies such as hot baths, Turkish baths, rest, sleep, aromatic foot baths; and a nutritious diet was also recommended.

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