SUMMARY

In an extensive survey of recent literature on perforating eye lesions, different aspects of this theme are discussed. The following items are reviewed: age and sex of the injury patients, the different kinds of foreign bodies and the prognosis in each case. The advantages and disadvantages of the various extraction methods with the magnet are discussed at greater length; it is clear that most authors prefer the trans-scleral route. After this the complications are described as they are found in literature.

In a separate chapter the perforating eye injuries in war are reviewed with special reference to the differences between those and peace-time wounds, with a few words on possible preventive devices. The end of the first part is formed by the laboratory experiments and clinical observations on sulfonamides and the best ways of administering penicillin in eye infections in general, and in perforating injuries in particular. From this it becomes evident that these therapeutics generally are considered a valuable gain; that sulfacetamid given orally causes the highest concentration in the anterior chamber, and that the best way of administering penicillin is by way of subconjunctival injection together with adrenaline or procain.

The same subjects are then treated in connection with our own material. The highest percentage of injuries occur in males between 16 and 25 years, caused, presumably, by youthful exuberance and lack of experience in the first years of industrial labor.

As regards the localisation of the wound it appears that corneo-scleral wounds have the worst prognosis. The number of infections was less than expected. As to the nature of the foreign body, the best prognosis is found in iron splinters, wood and stone particles. A survey of the various extraction methods shows that the posterior route gives more retinal detachments, the anterior route a greater chance of infection. In war injuries, more than 60% of the splinters found were non-magnetic. The greater part of these were removed by the posterior route.

The last chapters are those on Infection and Invalidity. From these the great value of modern therapeutics is clearly seen, especially that of penicillin in posttraumatic infection; which results in less enucleations and — though less certainly because of the small number of patients — in more cases of completely recovery.

Conclusions

1) Most perforating injuries occur in young labourers.

2) Bilateral injuries are practically seen in war only.
The danger of sympathetic ophthalmia seems to have diminished.

4) Intra-ocular foreign bodies in war-time are mostly non-magnetic, at least when acquired on the battle-field.

5) We saw more infections in extraction through the anterior chamber, and more retinal detachments in extraction by the posterior route.

6) The use of sulfonamides and penicillin results in:
   a) a greater chance of preservation of the bulbus;
   b) a greater chance of preservation of sufficient vision for 100% validity.

7) The sole use of sulfonamides has a marked effect on ultimate vision and validity, but considerably less than the combined therapy.

8) It is very important that the therapy named above is started as soon as possible after the injury.

9) No favourable effect of modern therapeutics is to be expected when the time lapse between the injury and the onset of therapy is two days or more.