

ABSTRACT P4

The Development of Cataract Treatment in Medieval Arab/Islamic Ophthalmology Texts

Abdullah Ashraf Rafique Ali¹

Objectives: To review the development of cataract treatment in the medieval Arab/Islamic world by looking at the practices of medieval Arab/Muslim oculist as documented in the surviving Arab/Islamic medical and ophthalmology texts. **Methods:** Chapters regarding cataract and its treatment in ten medieval Arab/Islamic ophthalmology texts were analysed. The analysis looked at the literature that were produced within a period of almost 500 years, starting from the first extant medieval Arab/Islamic ophthalmology treatise, the *Ten Treatises of the Eye* by Hunain ibn Ishaq (died 242 AH/865 AD) up until *The Ophthalmological Principle in Diseases of the Visual System* by Sadaqah Ibn Ibrahim Al-Shathili (died 751AH/1350AD). Their description of the disease, diagnosis and surgical technique were analysed and compared with both the classical Greek understanding and against the modern concept of the disease and its treatment. **Results:** Building on classical Greek knowledge, early Arab/Islamic oculists expanded upon the classical texts. They improved the understanding on the disease and were the first to describe certain aspect of the disease such as cataract-induced myopic shift. They described in detail the removal of cataract by couching, including the first detailed description of couching with a hollow needle. They also modified and improved the surgical instruments. Some aspects of surgery that still hold true today were also first documented during this period, such as the possibility of corneal decompensation secondary to iatrogenic corneal endothelial damage. Case reports were used to illustrate the management of difficult and unique cases. **Conclusion:** Medieval Arabic and Islamic oculists not only continued and expanded the knowledge gained from classical Greek texts, but also contributed to the development of cataract treatment. The surgical techniques which were described in the Arab/Islamic ophthalmology texts continued to be practiced right up until the advent of modern medicine in the 19th century.

Keywords: ophthalmology, history, cataract, Muslim

1. Department of Ophthalmology Faculty of Medicine, Universiti Teknologi MARA, Selangor, Malaysia

International Journal of Human and Health Sciences Supplementary Issue 01, 2025

DOI: <http://dx.doi.org/10.31344/ijhhs.v9i10.810>

Correspondence to: Abdullah Ashraf bin Rafique Ali, Ophthalmologist, Department of Ophthalmology, Faculty of Medicine, Universiti Teknologi MARA, Selangor, Malaysia. Email: refikoglumd@gmail.com