CHAPTER II

HISTORICAL BACKGROUND OF TRACHOMA IN INDIA
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The word "trachoma" has been derived from the Greek "Trachys" meaning "rough" which describes the characteristic appearance of conjunctiva. Although this disease involves the structure of the eye which can be examined easily by the naked eye and through advanced scientific ophthalmic instruments, it had remained a mystery to scientists for thousands of years.

The eye disease trachoma has been associated with poverty and overcrowding and one can say that they are as old as overcrowding and poverty themselves. Its place of appearance is unknown and many believe that it has been probably conveyed to every continent through pre-historic times. However the treatment for trichiasis has been described in a Chinese medical treatise dating back to 2679 B.C. Egyptians also knew this disease 1500 before our era (Eber's papyrus) (57).

The present terminology used by common people for trachoma varies in different parts of India, for instance, it is known as "Rohe" in Uttar Pradesh "Kukre" in Punjab and "Khil" in Gujarat, etc. Even now it is learnt that some of the Rawals perform operations for entropion (complication of trachoma) in villages.

Trachoma has been known to be present in India from time immemorial. In some of the edicts of Bihar also it has
been mentioned in pre-Susruta days (36). It finds a worthy
mention in Susruta written thousands of years before Christ.
Chapter 3 of uttar tantar of Susruta verses 9,10,11 and 12th
gives us an idea about the existence of the disease, then
chapter 16 verses 1-4 deal with the operations described for
entropion. It may be said that trachoma has been in India
since indefinite period as in other countries like Mediterranean
Africa, Egypt, Sudan, Moracco, Spain, Yugoslavia, China, Japan,
Australia, Indonesia, Thailand and others. The disease is
supposed to have spread from Egypt, though the highest incidence
was in the Middle East and countries bordering the Mediterranean.
India was also not cut off from marine trade from the early
days and possibly this may be the reason why some earlier workers
have reported 25% incidence in Western parts of Kerala and
coastal areas and 5% in Madras. It is difficult to say when and
how actually the infection actually set in India. Probably
trachoma arose among the nomadic races of Mongolia (24), from
whom it spread Westward with the Mongol invasions, infecting
the inhabitants of every country until it reached the countries
bordering Mediterranean sea. This has been stated by Mac Callan
(24), as follows :

"Trachoma is practically universal among the Mongolian
and Semitic races of the East and among the Indian tribes. It
is widely spread among the caucasians of India and among the
Malayans."
During the I World War when the Napolean army reached Egypt most of his army men were affected with the eye disease, known at that time as "Ophthalmia militaries" or ophthalmia Egyptian. Some of these men have been reported to have become blind and when the infected many returned back to Europe they inturn infected the population there. Daunt (24), has reported that, when the British regiment No. 44 came to India from Egypt, trachoma cases were already seen in Ghazepore. Travellers in the XVI-XVII centuries who came to India through Port Said have also reported the endemicity of trachoma in India.

With this background one may also say that trachoma came to India through Mongol conquerors who invaded this country many a times and ultimately established in India. This inference appears to be true as the distribution of trachoma in the country supports this view. The present study described in subsequent chapters also reveal a high prevalence in the north and north western parts of the country. These were the regions where the invaders - Aryans and the Muslims came from the north, and settled after their invasion by pushing the original inhabitants to migrate to Southern and Eastern regions.

Further the prevalence of trachoma in India has been reported by Dr. Mac Callan in his book on Trachoma under epidemiology of the disease. He gives the wide spread prevalence of trachoma throughout India. In this connection he cites some interesting paragraphs which appear in war office report of the Health of the Army, (1931, vol. ixvii p. 21, also Annual Report of the public health commissioner with the Govt. of India, 1931 vol. ii p. 36) as follows:
The most important work in this department has been the controlled enlistment of trachomatous recruits into the Indian Army. This has developed into an investigation into the nature and extent of the disease as met with in North India. The results are (i) The disease is widespread among certain classes, particularly Sikhs among whom well over 90 percent are infected (ii) Infection starts in childhood and in majority progresses to reach a quiescent stage which produces little disability (iii) In the past large numbers have been enlisted and several as efficient soldiers throughout the colour service (iv) No evidence has been found to show that disease is so infectious as to render the enlistment of these men a danger to their fellows or to the British Troops serving them.

During the year, 621 trachoma recruits have been enlisted and of these 65 have been discharged as incurable. A large proportion of these incurable cases was enlisted during the early stages of the experiment when the type of case suitable for enlistment was not so clearly defined with increased experience the later results have been more satisfactory."

Rejection for enrolment with regard to recruitment in the army on account of trachoma has also been reported in the Annual Report of Public Health Commissioner with the Govt. of India p. 62 as 12.8 percent of the total examined were found to be trachomatous.

Dr. MacCallan further refers to the examination of school children of Simla on the heights of lower Himalayas at a school of 1300 boys where only 3.1 percent were found to be infected.
Also the report of the public health administration in Punjab for 1932, p. 32 states that trachoma is so rife that "A Pamphlet on the disease in English was printed and copies were freely distributed in schools through the Director of Public Instruction. An Urdu edition of the pamphlet is also under preparation and will also be distributed shortly through some agency."

Reporting on the incidence of trachoma, a medical officer from Lucknow remarks as follows:

"Looking into hospital records, a little over 60 percent are cases of trachoma. The special conditions prevailing here are the dusty nature of the streets, roads and villages, the extremely insanitary conditions of our towns resulting in excessive breeding of flies, the economic cause, poverty, above all the baneful social customs, the purdah." (24).

In a paper on Trachoma by Wesley G. Forster and J.R. McGibony (56), they say that "The diagnosis of trachoma first began to appear in reports of Indian Service physicians about 1900." Leaving these reports aside, until 1955 no attempt was made to study the statistical analysis of the incidence, relative and absolute of trachoma in India except by Ursekar (53). Ursekar and Cooper in their approach to the study of geographical distribution of trachoma have pointed out the unequal distribution of trachoma in India and even the pockets of very low incidence in otherwise highly infected areas with similar living conditions. In this study they have concentrated on the reports received by the District Medical Officers of Health in each state which has not given the correct picture as all the trachomatous individuals
do not usually turn up to the hospital for treatment in the early stages.

Victor C.R. Ramboo (1960) (55), while reporting on the uneven distribution of trachoma among the hill people of the Punjab and different communities in South India has stated that in the hills not only was there less trachoma but that if trachoma was present it was running a milder course. And also it has been pointed out that in Vellore (Madras State) Brahmans and Muslims almost exclusively have trachoma because of the use of Kajal (a kind of mascara).

Tulsidas (52), in a noteworthy clinical study has made a distinction between trachoma of the rich and trachoma of the poor. He says that only the latter variety of trachoma runs into the stage of distressing sequelae of severe cicatrization and entropion.

Thus one will see that no complete statistical study had been done on the prevalence pattern of trachoma until 1955, covering the whole of rural India. After world war II, the World Health Organisation took up the problem of trachoma as an international scourge which called for urgent treatment and control. The countries bordering the Mediterranean and Japan started the work in earnestness on trachoma control.

India had to wait until 1955 as she had more important problems to attend. Government of India with the aid of international agencies World Health Organisation and UNICEF established the Trachoma Control Pilot Project at Gandhi Eye Hospital, Aligarh under the administrative control of the Indian Council of Medical Research to carry out control measures against
the disease based on a preliminary survey conducted in Uttar Pradesh. The project has also carried out a countrywide random sample survey covering all the 302 districts from the fifteen states of India to find out the geographical distribution of trachoma and other common eye diseases. Its ultimate aim being, control of the disease leading to eradication by introducing suitable treatment through broad spectrum antibiotics. It is also assisting in finding out a suitable vaccine for the trachoma virus through Trachoma Research Centre established under Indian Council of Medical Research at the Institute of Ophthalmology - Aligarh Muslim University, Aligarh.