

LEPROSY OF THE EYE IN SOUTH KOREA

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South Korea, with approximately 23 million people, is said to have approximately 100 trained ophthalmologists, of whom about one-half serve in the armed forces. Hence, only about fifty oculists, mostly residing in urban areas, are available for the needs of the entire civilian population—a ratio of one ophthalmologist per half-million people. Under these circumstances there is small wonder that patients afflicted with leprosy cannot hope to, and in effect do not, receive ophthalmologic consultation or care. Nor are eye services forthcoming from other than medical sources. South Korea has no Lions Club or other service club that assists the visually handicapped, and it has no equivalent of our Society for the Prevention of Blindness. A branch of the American Foundation for the Overseas Blind operates in Seoul, but it is said that it does so with some difficulty because the blind in Korea prefer relief or plain money hand-outs to education or plans for rehabilitation. The missions and mission-sponsored hospitals treat eye affections as the need arises along with all other diseases, but they do not pay special attention to ophthalmology.

According to Dr. M. L. Smith, public health officer of the Office of the Economic Coordinator for Korea, there are approximately 14,000 known patients with leprosy in 10 national and mission-sponsored leprosaria in South Korea. In addition, there are about 7,000 patients living in 39 colonies. Dr. Y. S. Yun, in 1954, gave the total of registered patients as 25,000 and estimated an over-all prevalence of 45,000. Dr. R. G. Cochrane suspects that the over-all figure may be nearer 150,000. During my visit in South Korea I found the prevalence of eye involvement among leprosy patients to be approximately 10 per cent. This percentage corresponds to statistics recorded in Okinawa, Formosa, Japan, and Hong Kong. If the figure of 14,000 patients with leprosy is accepted for South Korea, there should be a minimum 1,400 patients with various degrees of leprosy eye disease. In all likelihood, however, the actual number of patients with eye involvement considerably exceeds this number.

The types of ocular lesions that were noted are commonly due to lepromatous leprosy. They include lepromas of the lids, cornea, iris, and choroid, and the sequelae of serous or plastic uveitis with cataracta, complicata. Along with these lesions the aftermaths of facial palsy, such as ectropion, lagophthalmos, pannus, exposure keratitis, corneal macula, and corneal ulcers, were also frequently noted.

At the time of my visit no prophylactic, and practically no therapeutic, measures directed to the eyes were employed. Patients with leprosy are never admitted to the wards of general hospitals. As a result, medical

students have very little or no opportunity to observe the management of the eye complications of leprosy. However, I did see one patient who had had a successful iridectomy performed by a fellow lay-patient! The latter was said to have obtained his skill from observing and assisting a Japanese oculist assigned to the colony several years ago.

The medical, surgical, laboratory, and x-ray facilities at the leprosaria I visited were for the most part poorly equipped and understaffed. The supply of sulfones appeared to be irregular, intermittent, and unreliable. Only a few patients wore corrective glasses. Those who were blind received no special considerations and were left in the hands of other patients.

It would appear highly desirable that legislation be enacted regarding the over-all treatment of patients afflicted with leprosy. Such a law has been adopted and is successfully operating in Japan under the title of "Leprosy Prevention Law." It specifies that patients in leprosaria should devote themselves to their treatments and observe the rules of their institutions. It also empowers the directors of those institutions to impose warnings and punishments. In actual practice these rules are seldom invoked, since most patients realize that the laws have been laid down for their own ultimate benefit and protection.

Ideally, the active treatment of leprosy should consist of adequate and prolonged sulfone therapy under medical supervision. This, *per se*, is likely to prevent or reduce eye complications and concurrently clear up co-existing trachoma. Efforts should be made to eliminate treatment by untrained or poorly trained personnel. This type of practice may do more harm than good, and in cases of acute leprosy reactions associated with severe eye complications may result in permanent ocular damage. In addition to adequate sulfone therapy, supportive treatment with iron and vitamin compounds, adequate hygiene and dietary measures should be instituted wherever indicated.

The majority of leprosy eye lesions are preventable. Specific preventive measures include the use of dark glasses; bland protective, soothing collyria and ointments (such as 1% methyl cellulose drops and 10% boric acid ointment); 10-30 per cent sulfacetamide or antibiotic eye drops and salves; along with 1-2 per cent atropine and 0.5-2.5 per cent cortisone preparations for topical use. A supply of these drugs should be kept available at the dispensary of each leprosarium. Under the guidance of the consulting ophthalmologist the superintendent should designate and train someone regarding their use.

A scientifically valuable and morale-building adjunct in the management of eye complications is the prescription of corrective eyeglasses and magnifying glasses when needed. Eyeglasses may be obtained free from "New Eyes for the Needy," Short Hills, New Jersey. This organization collects discarded or old glasses and ships them overseas to recognized, charitable and worthy organizations. I understand that the ROK Army

presently operates a prosthetic laboratory. Could this source be tapped to supply plastic or glass eyes for needy patients in leprosaria?

Ophthalmologic consultation and surgery in leprosaria or leprosy villages could be attended to by Korean eye specialists themselves. Dr. B. W. Kong, ophthalmologist of Seoul, evinced considerable interest and enthusiasm in lending a helping hand to operate on eyes of leprosy patients. It would appear likely that such a surgeon could perform much of the required surgery each year at a leprosarium within a few days or weeks. Korean ophthalmologists might volunteer or be induced to serve on a rotation basis as part-time consultants in leprosaria throughout the country. In doing so, they could learn and eventually teach young oculists the techniques of eye operations frequently performed in the management of ocular leprosy lesions. These include among others the repair of lagophthalmos, ectropion, entropion, iridectomy and the removal of complicated cataract. Thus it would appear that for the present "on the spot" training in South Korea for the management of problems incidental to ocular leprosy is feasible, and indeed more desirable than sending ophthalmologists abroad.

Fortunately, in South Korea, learning and higher education are regarded very highly. Accordingly, it might be possible to stimulate a few senior medical students or younger physicians to specialize in the field of public health, with the hope that some of them may take an interest in leprosy. Others specializing in ophthalmology may likewise be stimulated to become interested in the ocular complications of a disease which Cochrane described as one of the "most thrilling and exciting adventures on which any medical man can embark." In my opinion, this training can be best provided through actual experience in working with leprosy patients in Korea.

From the foregoing it would appear that, as time goes on, with proper organization and if need be with additional financial or other inducements, the medical and surgical phases of ocular leprosy in Korea could be efficiently handled under the direction of three or four interested Korean ophthalmic surgeons. On the style of village surgery in India, traveling teams consisting of a senior and junior ophthalmologist accompanied by several medical students and two or three nurses and orderlies could visit leprosaria for a few days once or twice a year and satisfactorily attend to their ophthalmic needs. Should these teams encounter problems that they are not qualified to handle, they could call upon specialists at the proposed Scandinavian Medical Center or upon American ophthalmologists attached to the United States Armed Forces in Korea.

For the present, and until the large backlog of potential surgical eye cases has been attended to, it would appear advisable to secure help from the outside. I would hazard the guess that a qualified foreign ophthalmic consultant, with adequate local help, could attend to most of the required prophylactic and therapeutic eye-surgery procedures of the country with-

in three months' time. When Korea's economic set-up permits, it is hoped that leprosaria may eventually be equipped with up-to-date surgical and laboratory facilities. Surgery as well as research could then be carried out at these institutions.

If possible, outpatient clinics should be held periodically throughout the country. At these clinics, former inmates of the leprosaria could continue to be observed and to receive outpatient care. Others who do not know that their ailment is due to leprosy, and those who through fear of ostracism are doing nothing about their disease, could come forward.

Lastly, improved public relations should be cultivated. This could be accomplished by publicizing the slogan "Leprosy can be cured." Posters in key areas, lantern slides shown among advertisements in the moving picture theaters, leaflets with questions and answers about leprosy, and articles in the newspapers and magazines are additional means of accomplishing this.

In the course of time it is possible that the prevalence of leprosy in Korea can be reduced and the disease eventually eradicated. The attainment of this goal requires the application of improved methods of medical and surgical treatment, and improved and more vigorous efforts at prevention. It also requires a mass campaign to overcome age-old, ingrained prejudices.

SUMMARY

The author, an ophthalmologist, reports on a survey he conducted for the United Nations among leprosy patients in South Korea. He found pathologic lesions of the eyes and adnexae among 10 per cent of the patients examined. Concern is expressed over the lack of regular, continuous systemic treatment with sulfone drugs.

The following recommendations are offered: Prescription of corrective eye glasses where needed. Sun glasses in instances for relief from glare. As a prophylactic measure for early lesions of the lids, bland, protective ophthalmic solutions and ointments. For purulent conjunctivitis, sulfacetamide or antibiotic eye drops. For inflammation of the uveal tract, local instillation of 0.4-1.5 per cent cortisone eyedrops, along with a conventional mydriatic such as 1 per cent atropine.

For deforming and disabling lesions of the eyelids and eyes, judicious eye surgery within the confines of the settlements themselves is recommended. It is suggested that a competent traveling ophthalmic team could effectively handle the majority of leprosy eye lesions that require surgical intervention.

RESUMEN

El A., oftalmólogo, describe una encuesta que llevó a cabo por cuenta de las Naciones Unidas entre los leprosos de Sud-Corea. Descubrió lesiones patológicas de los ojos y anexos en 10 por ciento de los enfermos examinados. Exprésase ansiedad con respecto a la falta de tratamiento general, continuo y regular, con las sulfonas.

Ofrécense las siguientes recomendaciones: Recétense lentes rectificativas cuando se necesiten y, en ciertos casos, lentes ahumadas para alivio del deslumbramiento. Como profiláctico contra las lesiones incipientes de los párpados úsese soluciones y ungentos oftálmicos blandos y protectores. Para la conjuntivitis purulenta, gotas oculares de sulfacetamida o antibiótico. Para la inflamación de la túnica úvea, instilación local de gotas oculares de cortisona al 0.4-1.5 por ciento, junto con un midriático aceptado, tal como atropina al 1 por ciento.

Para las lesiones deformantes e incapacitantes de los párpados y los ojos, recomiéndase cirugía ocular juiciosa ejecutada en los recintos de los caseríos de los leprosos. Apúntase que una brigada oftálmica competente y móvil podría atender eficazmente a la mayoría de las lesiones leprosas del ojo que requieren intervención cruenta.