

## A Brief Review of the Eye, Ear, Nose and Throat Department at the National Leprosarium, Carville, Louisiana.

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**E**YE, nose, throat and laryngeal lesions are quite common amongst the patients at the National Leprosarium, Carville, La. The author has never seen an ear lesion (excluding auricle) which could be attributed to leprosy.

### EYE.

The eye is often involved. Inflammatory lesions of the uveal tract are very painful and often lead to loss of sight.

In the treatment of lagophthalmos, several procedures have been followed with fairly good results. Lateral tarsorrhaphy was performed on four or five cases with a great deal of relief to patient. Lacrymation was less marked and the cornea was saved from undergoing further degenerative changes. Some of the patients object to this procedure when only one eye is involved. In such cases we have used the Kuhnt-Szymanowski procedure, as these patients happened to be elderly individuals. While the ectropion was not totally corrected relief was secured by shortening of the lower lid. The author had occasion to insert strips of fascia lata around the eyelids, passing under the internal canthal ligament and through the temporal fascia. This operation was done on two patients suffering from facial paralysis following mastoidectomy. In both cases relief was obtained. These patients were not sufferers of leprosy.

Our treatment of the infiltrated areas about the limbus has been mainly with the electric cautery. An area about one millimeter in width is cauterised. We are careful to destroy all conjunctival vessels in the involved area. Our cauterisation includes superficial layers of the sclera, being careful not to go too deep on account of danger of injuring the underlying structures.

Corneal infiltration is a major problem at our hospital. When accompanied by cyclitis or iridocyclitis we use atropine twice daily, salicylates for pain, and use some foreign protein for subcutaneous or intramuscular injection. Most of the patients receive relief from pain after use of the foreign protein and there is also a lessening of the inflammation. We have not used boiled milk on account of the reaction and pain usually associated with milk. We have

used the hemoprotein of Brooks, diphtheria antitoxin and Aolan, a milk preparation. We have favoured Aolan, as there is no rise in temperature, no pain associated with the administration and on account of its cheapness. Brooks hemoprotein has been of value but has to be given intravenously for best results.

Intraocular surgery, where there is an associated uveal lesion, has been disappointing. At first the result is good but soon a plastic exudate is observed occupying the operated area. After several operations followed by the irido cyclitis attacks, the eye-ball begins to atrophy, with its disastrous consequences.

Subconjunctival injections of epinephrine hydro-chloride followed by administration of powdered atropine has been found of value in cases of chronic irido-cyclitis.

Cases of chronic keratitis are fairly numerous and are a problem on account of the damage to vision. We have used gold sodium thiosulphate intravenously, foreign proteins and instillations of 20 per cent. chaulmoogra oil and dionine into the conjunctival sac. We believe our results have been better from the use of dionine than other agents.

Cataract operations where there is an associated uveal lesion have not been beneficial. One patient with cataracts, not associated with leprosy, was operated on, and sees 20/30 with corrective lenses. This patient is about thirty-five and was admitted to the hospital with cataracts.

#### NOSE.

Many patients suffer with nasal lesions. Septal perforation, lepromatous growths of septum and inferior turbinate body, ulcers and accumulation of dried blood, pus and desquamated epithelium are the common nose lesions met with. Several patients have represented a complete stenosis of the nasal passage from firm fibrous adhesions at the site of an old ulcer. A few cases of facial paralysis have been troubled by collapse of the alae. Another group suffer from atrophy of the alar cartilage.

Lepromatous lesions of septum and turbinate have been most successfully treated with the electric cautery. We destroy all visible lesions which gives the sufferer immediate relief and subsidence of nasal bleeding. Following cauterisation, the patient receives treatment twice daily with 30 per cent. chaulmoogra oil in olive oil or chloretone inhalant. The chloretone or chaulmoogra is used as a spray. We have not found solutions of ephedrine as useful as the chaulmoogra or chloretone. Nearly two hundred patients report

twice daily for their nasal treatment. The spray removes any crusts or secretions in the nose and the freer breathing is gratifying to the sufferers.

At first nasal stenosis was a problem because of the recurrence of more scar tissue following operation. We now remove the affected turbinate bone, including remains of the middle and inferior. Following the operation the patient wears a rubber tube for four to ten weeks. After healing has occurred the tube can be removed and we have not noted any recurrence of the trouble after two years.

Infection of the lacrymal sac is included under the nose as we make an opening into the nose following removal of the sac. The operation has been performed on about a dozen cases. After removal of the sac by the external route, we make an opening into the nose by means of a mastoid curette. The external wound is then closed. Patients so treated have been entirely cured of any further trouble from the lacrymal region. Those who did not have the nasal opening continued to discharge pus into the conjunctival sac.

#### THROAT.

Tonsillectomy has been performed on about seventy-five patients in the past four and a half years. We use local anæsthesia exclusively. Healing is as prompt as in non-leprous patients. Secondary hemorrhage occurs about as frequently as one finds in a non-leprous patient. We give our prospective tonsillectomy cases calcium lactate a week before operation. A number of our operative cases have been free or practically free of "nerve pains" since operation, showing that the tonsils do act as a focus in a number of instances. We do not perform tonsillectomies on patients who have marked laryngeal or pharyngeal involvement.

#### LARYNX.

Laryngeal involvement is distressing and at times fatal. The patients showing laryngeal involvement are advanced cases and usually show numerous lesions about the body including the oro and the hypopharynx. Involvement of the epiglottis and the posterior commissure are the common sites of the lesions. We have used the electric cautery on ulcerated areas. Applications of silver nitrate to the affected area and the daily use of sprays to the affected part are beneficial. When there is marked obstruction tracheotomy is resorted to. Light therapy to the neck has been tried without benefit. We are now trying light therapy through the mouth.

### E.A.R.

As stated at the beginning of this paper we have not seen any lesions of the external auditory canal, middle or internal ear, that we could attribute to leprosy. Our most common lesion is the middle ear abscess which is secondary to nose or throat lesions. Obstruction of the eustachian tube is sometimes met with, secondary to lesions in the nasopharynx.

We have performed five mastoidectomies in the past four and a half years. One patient was suffering with a lateral sinus thrombosis which required ligation of the jugular vein and opening of the affected part of the sinus. The convalescence in the mastoid cases was uneventful. Local anæsthesia was used on all cases.

### PLASTIC SURGERY.

One patient suffering with a bilateral facial paralysis was treated by inserting a strip of fascia lata in each side of cheek and elevating the lower lip. He can now voluntarily close his mouth and is not worried by the saliva flowing from the mouth.

A few nasal deformities have been treated by inserting sections of rib in the affected area. At first the result was good but later there was an absorption of bone and cartilage and a return of the original deformity. We are now using animal ivory which we hope will be of some benefit.

The author has briefly summarised his work at the National Leprosarium during the past four and a half years. During that time about fifty thousand examinations were made by the author. All the lesions met with in private practice are encountered plus the lesions peculiar to leprosy. At first, we would become enthusiastic when some new treatment was recommended which was said to be curative, but after considerable experience we can truthfully say that the disease in its many manifestations is as puzzling as ever.

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### Note.

We find that "LEPROSY REVIEW," Vol. II., No. 4, is out of print. If any readers would be willing to return their copies of this issue, we should be very grateful.