

OCULAR AND OTORHINOLARYNGOLOGICAL LEPROSY BEFORE AND SINCE SULFONE THERAPY

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PAST

The ocular complications of leprosy can be, when developed, the most serious of all the affections of the visual apparatus. Pinkerton, in 1927 (1), concluded, "All leprosy patients sooner or later are affected with ocular complications." Lyder Borthen (2) put the frequency of such conditions as high as 98 per cent of cases. Aparisi Gijon (3), in 1933, reported 65 per cent in the Fontilles sanatorium. The statistics of the ophthalmologists of São Paulo have given figures so large as to include almost all of the cases examined.

In the absence of a curative agent, leprosy will affect all the delicate membranes of the anterior segment of the eye, from the episclera—considered as a "prelude to leprosy keratitis" (Jeanselme)—to the sclera, the cornea, the iris, and the ciliary body (4). This forms a pathological entity which some call "ocular reaction," although others prefer to specify the structures most affected and call these conditions leprotic iritis, or sclerokeratitis, or iridocyclitis. Involved in repeated acute outbreaks, the iris becomes very seriously affected, with exudates that organize and involve the entire pupillary area, completely obscuring vision although light perception is always retained since only the anterior segment is involved. In some cases the acute invasion is so marked that in only a single episode there is total infiltration of the sclera, cornea and iris, causing complete blindness. These we call "superacute" cases. To the specialist the incipient invasion of the episclera always heralds frank lepromatous involvement and certain blindness. The most severe condition of acute involvement of the eye in leprosy patients is without parallel in any other disease.

The therapeutic agent used might bring relief, and would sometimes benefit the transparent visual media, but in further outbreaks such treatments failed, without checking the invasion. Surgical removal of the lacrimal gland as a treatment for acute eye complications, introduced by me, (5) never failed, completely relieving the pain and stopping other acute subjective manifestations. This operation was performed in 1948 on 31 cases at the Sanatório Santo Angelo and 8 cases in the Sanatório Padre Bento, and in 1949 in one case on request of Dr. Lauro de Souza Lima and in another case at Santo Angelo.

The iridectomies that were frequently performed in that period were

almost always unsuccessful, because the space that was opened filled up in a few days with exudate that became organized, again obliterating vision. Cases operated on for cataract and hypertensive iritis were not benefited, because almost always the consistency and transparency of the aqueous humor and vitreous humor were affected. Leprotic ocular manifestations, the most serious in ophthalmologic pathology, causes in leprosy patients the disappearance of the outer world because of blindness.

Regarding the otorhinolaryngological manifestations of leprosy before sulfone therapy, one is chronic coryza with crusting of variable severity. Epistaxis is frequent, and, together with friability of the nasal mucosa, it is as revealing a sign of leprosy as hemoptysis is of pulmonary tuberculosis. Anterior rhinoscopy reveals diffuse infiltrations, ulcerations of the mucosa, perforations of the nasal septum, edemas, crusting, and congestion of the turbinates which may be either atrophied or hypertrophied. Frequently the nose becomes deformed by nodules around the external orifices.

The palate is involved by diverse lesions and sometimes destroyed. Nodules invade the entire pharyngeal region, accompanied by edema. The tongue is not spared, and it commonly exhibits nodules and infiltrations. Lesions of the mouth are frequent; they were found in 14 per cent of the cases in the Sanatório Cocais [Bechelli and Berti (6)].

The epiglottis, with infiltrations and ulcerations, appears edematous; the larynx is affected by infiltrations of the mucosa, submucosa and glands, forming prominent condensations with organized exudates seriously altering the vocal cords. Infiltrations, nodules and edemas, together with exudates produce symptoms of asphyxiation, and the patient may succumb if he is not saved by immediate surgical intervention.

In the period when this condition occurred the patients submitted to all kinds of local therapy, because there was nothing effective in general medication, which was then based on derivatives of chaulmoogra oil. In its persistent and insidious invasion the disease caused obstruction of the trachea by means of pharyngeal and laryngeal infiltrations, nodules, edemas and organized exudates, and the patient had no other recourse, than tracheotomy, which he welcomed because of his insufficiency of breath. In São Paulo, 235 tracheotomies were done between 1933 and 1948, apart from those of which there is no record or of which I have no personal information. Cássio Rolim operated in 16 cases, Jorge de Andrade in 12 cases, Amendola in 26 cases, Cáo Trabábara in 22; Dirceu Araujo, of Cocais, performed 71 operations, Abreu Silveira 52, Itajiba Vilaça 25, and, finally, Plino Prado, who in 1948 did the last tracheotomy performed, had 11 cases. With the last case referred to ended the indication for this emergency surgery, which was the only relief for the paroxysms of the patients. It gave them hope at least of living less uncomfortably, and in some exceptional cases the hope was not false since in them—cases of spontaneous cure, the "burnt-out" cases of the

British—the disease regressed and the lesions resolved because of a resistance to the disease.

PRESENT

With respect to ophthalmology, at present leprosy of the eye is limited to acute attacks and to chronic and plastic lesions resulting from an invasion that had occurred prior to sulfone therapy, or in cases found in an advanced stage not treated with sulfone. Clear evidence of the mildness of the symptoms of pathology of the eye under sulfone treatment is seen in the quick regression of acute episodes, without the sequelae that were previously seen. Cases that we used to call "superacute" have become nonexistent. When one encounters a patient with acute ocular leprosy, one can diagnose it at once as either an old lepromatous case or one which has had no sulfone treatment. It is noteworthy that refractions by the oculist now exceed in number the examinations for ocular infection, the reverse of the situation in the past.

Surgery of the eye in treated patients offers a better chance for restoring the transparent media, without great danger of postoperative exudates the organization of which may obliterate the artificial pupils or iridectomies. Extirpation of the lacrimal gland, once indicated for acute conditions refractive to all other kinds of treatment, has not been done since 1949, which is evidence of the absence of acute ocular complications. Pericorneal lepromas and sclerosing keratitis are not seen now; hence galvanocautery, commonly used in the past, is no longer employed. In fact, that is to be said of all the operative procedures of the chaulmoogra era, and there remain only those that are commonly used in the clinical work of oculists generally. Gone are the days when one saw patients headed for the clinics, groaning with pain, eyes streaming with uncontrollable tears, and fearing the impending loss of sight.

In otorhinolaryngology, the results of sulfone therapy are most convincing. There are cessation of all progress of the affection, absence of all pathologic symptoms, and complete restoration of the physiologic mechanisms of the larynx and the vocal cords. Thanks to the treatment, leprotic complications of the larynx are never encountered, although there remain cases with the early symptoms that have been mentioned: infiltration, congestion, ulceration and bacteriological positivity of the nasal mucosa; and by them the diagnosis of leprosy can be made at this stage. Worthy of note are the cases which began with sulfone therapy after having had tracheotomies and who were wearing tubes; because of the recovery of their respiratory and vocal organs, these patients have had their tubes removed, with plastic operation of the tracheal opening. The most outstanding confirmation of the great value of sulfone therapy in otorhinolaryngology is the complete absence of tracheotomies since 1948, and the cessation of consultations about the condition. The very numerous

plastic operations on the dorsum and the complete restoration of all parts of the nose and mouth attest to the restoration of the tissues.

SUMMARY AND CONCLUSIONS

Since the adoption of sulfone therapy, leprotic eye pathology does not occur in treated cases who had not presented that involvement before. Ocular pathology has disappeared from the picture of leprosy in treated cases.

Otorhinolaryngological affections involving the pharynx and the larynx have not been in the picture of leprosy since 1948. There were 235 tracheotomies done from 1933 to 1948, but since then to the present (1955) there have been none. Disturbances in this field now seen are restricted to nasal lesions (rhinitis, coryza, bacteriological positivity), which in most cases the patients had when their condition was diagnosed.

SUMARIO Y CONCLUSIONES

Desde la adopción de la sulfonoterapia, no se observa patología leprosa del ojo en los casos tratados que no habían manifestado esa semiología antes. La patología ocular ha desaparecido pues, del cuadro de la lepra en los casos tratados.

Desde 1948 tampoco han figurado en el cuadro de la lepra las afecciones otorrinolaringológicas en lo tocante a la faringe y la laringe. De 1933 a 1948, se habían ejecutado 235 traqueotomías, pero desde entonces hasta ahora (1955), no ha habido ninguna. Los trastornos en este terreno se limitan actualmente a lesiones nasales (rinitis, coriza, positividad bacteriológica), de las que, en la mayor parte de los casos, ya padecían los enfermos al diagnosticarse su dolencia.

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