Lep. Rev. (1968) **39**, 1, 49-50

Lepromatous Leprosy treated with N' Acetyl Sulphamethoxypyridazine

J. C. HATHAWAY, M.D.
Medical Administrator, Hale Mohalu Hospital, Hawaii, U.S.A.

Within the past few years sulphonamides have been given a trial in the treatment of leprosy in various areas of the world. Most of these trials have been short series of patients and the results have been equivocal.

Fourteen patients with lepromatous leprosy were treated at Hale Mohalu Hospital (Leprosy facility of the State of Hawii) with n' acetyl sulphamethoxypyridazine (Acetyl Kynex, Lederle) from 15 December 1965 to 15 March 1967. All 14 patients were heavy lepromatous patients who had not responded to sulphones or had been intolerant to them.

The medication used was an orally administered suspension of the drug containing 250 mgm. per 5 cc. The dosage was 10 cc. daily for 1 week and 5 cc. daily thereafter for a minimum of 10 months and after that the dosage was cut to 5 cc. twice a week. The complete length of treatment was 15 months. Of the patients, 8 were pure Hawiians, 5 were part Hawiian, and 1 was Portuguese. The BI (scale 0-6), using the scraped incision method and the standard Ziehl-Neelsen acid fast stain, was 6+ in 12 patients and 3+ in 2 patients. All were adults, 8 men and 6 women.

Twelve of these patients, the ones with 6+ BI showed no clinical improvement and have been in almost continuous progressive leprosy reaction. Four of them have been unusually severe. Due to the lack of response to treatment it was decided to discontinue this study after 15 months. Skin snips with standard scraped incision technique made at monthly intervals continued to show 6+ BI in all.

The other 2 patients were the ones who showed only 3+ BI at the start of treatment. Of these 2 patients, 1 gradually improved and in about 6 months was clinically arrested. The sulphonamide was continued but dapsone (Avlosulphon) was begun cautiously—25 mgm. once a week and gradually increased until after taking this for 6 months, she tolerated 25 mgm. daily. At the end of 15 months the sulphonamide was discontinued and the patient has continued to stay clinically quiescent on 25 mgm. dapsone daily. Her BI has gradually improved and her last 3 scraped incisions showed 1+ BI. She is being continued on dapsone 25 mgm. daily.

The other patient showed less than 3+ BI at the start of treatment. She became almost clinically quiescent in about 5 months but was not entirely clear until after a year's treatment. Due to the fact that this patient has biopsy-proved amyloidosis of her kidneys the dose was reduced to 250 mgm. twice a week after 6 months' time. Her last scraped incision on March 1, 1967, showed 1+ BI. We have continued her on 250 mgm. twice a week. Due to her kidney condition and proved marked intolerance to sulphones she was never given another trial of dapsone.

There were no ill effects of any kind during the time of treatment that could be attrib ted to the medication. Urinalysis and complete blood counts were carried out every month and liver function tests every 3 months. None of these showed anything abnormal that could be attributed to the medication.

CONCLUSIONS

No conclusions can be drawn from such a small number of patients, but it would appear that under the conditions of this study, the use of n' acetyl sulphamethoxypyridazine has very little effect on severe sulphone resistant lepromatous leprosy but may be useful in less severe patients. No ill effects were apparent.

REFERENCES

1. PARIKH, A. C., *et al.* Therapeutics Lederkyn in the Treatment of Leprosy. *Indian J. Derm. Vener.*, **30**, 211-213 (Sept.-Oct.) 1964.
2. RAO, S. B. Lederkyn in the Treatment of Leprosy. *J. Mysore Med. Ass.*, **29**, 1-6 (Oct.-Dec.) 1964.
3. RAO, S. B. Treatment of Leprosy. *J. Mysore Med. Ass.*, **28**, 1-6 (July-Sept.) 1963.
4. EISMAN, P. C. Experimental Chemotherapy of Leprosy. *In:* Schnitizer, R. J. and Hawking, F. ed. Experimental Chemotherapy, Vol. II, New York, Academic Press, 1964, 501-558.
5. GHOSH, S and CHAKABORTY, B. K. A Long Acting Sulphonamide in Treatment of Leprosy: Preliminary Report. *Bull. Calcutta Sch. Trop. Med.*, **12**, 33 (Jan.) 1964.
6. YAWALKAR, S. J. and AURANGABADKAR, J. W. Newer Drugs in Leprosy. *Indian Pract.*, **18**, 75-78 (Jan.) 1964.
7. MERKLEN, F. P., *et al.* Regression of a Mycetoma of the Foot in a Leprous African after Large Doses of Sulphamethoxypyridazine. *Sem. Hop.*, **41**, 425 (Feb. 8) 1965.
8. BASSET, A. and BASSET M. Trials of New Drugs in the Treatment of Lepra. *Bull. Soc. Med. Afr. Noire Lang. Franc.*, **9**, 418-421, 1964.
9. GHOSH, S. General Principles of Treatment of Leprosy. *Bull. Calcutta Sch. Trop. Med.*, **13**, 27-30 (Jan.) 1965.
10. LANGUILLON, J. The Leprous Reaction, Definition, Clinics, Pathogeny, Therapy. *Med. Trop.*, **25**, 171-182 (Mar.-Apr.) 1965.
11. ASSHAUER, E. Lederkyn in the Treatment of Lepra. *Z. Tropenmed. Parasit.*, **16**, 73-76 (Apr.) 1965.
12. CHANG, Y. T. Effects of Capreomycin, Ethambutol, and Five Long-acting Sulphonamides in Murine Leprosy. *Nat'l. Inst. of Arthritis and Metabolic Diseases, Bethesda, Md. Abstract of papers sustained at the 4th Inter-science Conference on Antimicrobial Agents and Chemotherapy. Oct.* **26-28, 1964**, *N.Y., N.Y.*
13. COCHRANE, R. G. Chemotherapy of Leprosy. *Practitioner*, **188**, 1123 (Jan.) 1962.