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Letters to the Editor

EXPERIENCES WITH A PHENAZINE DYE, B628, IN THE TREATMENT OF LEPROSY IN CHINA

Sir,

Dr Levy reported (*Lepr Rev* 1981; **52:** 23–6) his studies on 4 analogues of clofazimine in experimental leprosy and summarized ' The results suggest the importance of the 2 *p*-chlorosubstituents that are a structural feature of clofazimine'. This conclusion is of considerable interest in relation to B628, one of the series of phenazine dyes[1] with the *p*-chlorosubstituents on the 2 benzene rings (Figure 1), and which has been synthesized by Sin Yi Pharmaceutical Factory of Shanghai in small quantity. Dr Ji Baohong has shown that B628 is similar to clofazimine in its activity against both *Mycobacterium leprae* and *M. lepraemurium* in animal models.[2–4] As a clinical pilot study, I treated 3 cases with lepromatous leprosy in South-west China with B628 as monotherapy for 5 months, from October 1974 to March 1975, at a dosage of 150 mg daily for the first month and 100 mg daily thereafter. Simultaneously, another group of 6 patients with LL or BL were treated with the same regimen in Shanghai for 6 months.[5,6] A dramatic clinical improvement was observed in 2 months, including the subsidence of nodular and diffuse

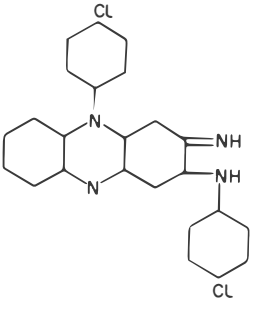

Figure 1. Structure of B628. [3-(*p*-chloroanilino)-10-(*p*-chlorophenyl)-2,10-dihydro-2-iminophenazine].

infiltrated skin lesions and the clearance of purulent nose discharge and nose blockage. The protracted ENL eruptions and neuralgia were under control after ½–3 months of therapy. Bacterial Index of skin smears showed no change after 5 or 6 months therapy, but the percentage of morphologically intact bacilli (MI) decreased sharply from an average of 24% to 2%. Although it had been expected that the skin pigmentation would be the main side-effect of this drug, the quality of colouring produced by it was less marked and more acceptable than the brick-red or chocolate colour developed by B663 (clofazimine) in Chinese patients. However, the following toxic effects had been noticed; elevated SGPT level occurred in 3 cases and gynacomastia in 2 out of 7 male cases. Because of the shortage of drug supply, the clinical use of this drug was discontinued, and all patients in these 2 groups were changed to dapsone therapy later on.

LI FUTIAN

Shanghai Zun Yi Hospital
Gong He Xin Lu
Shanghai, China

(Dr Li Futian has kindly translated the main parts of references 5 and 6 from Chinese to English and copies are available from this office. *Editor.*)

References

1 Barry VC, Conalty ML. Antituberculosis activity in the phenazine series. *Amer Rev Tuber Pul Dis*, 1958; **78:** 62–73.
2 Shanghai Zun Yi Hospital. Therapeutic research for murine leprosy. III. Therapeutic effects of a variety of drugs and combined therapy on murine leprosy. *Comm Res Derm*, 1975; **4,** 169–74.
3 Shanghai Zun Yi Hospital. Therapeutic research for murine leprosy. II. Therapeutic effects of ten drugs on murine leprosy. *Comm Res Derm*, 1974; **3:** 117–23.
4 Ji Baohong *et al*. The animal model of mouse foot-pad infection of Mycobacterium leprae for therapeutic research. *Chin J Derm*, 1980; **13:** 24–8.

[5] Dayao anti-epidemic Station & Shanghai Zun Yi Hospital. A short-term observation in the treatment of leprosy with B628. *Yunnan Med*, 1976; **(1):** 44–7.

[6] Shanghai Zun Yi Hospital. Therapeutic research for leprosy. IV. The observation of the effects of B628 against leprosy and leprosy reaction. *Comm Res Derm*, 1976; **5:** 76–8.