

Unusual Reaction to Intramuscular Sulfone in Two Leprosy Patients in Malaysia

TO THE EDITOR:

A large number of lepromatous patients resident in or nearby the National Leprosy Control Centre at Sungei Buloh, Selangor, are on injection therapy, usually 400 mg of sulfone twice weekly (2 ml from a 10 ml vial of microcrystalline dapsone in refined coconut oil). In the past 30 years perhaps a million of these injections have been given to patients at Sungei Buloh. Side effects have been few and minor, save for the rare formation of an injection abscess, but in April 1977, within two days from each other, two patients who had injections in the upper left arm developed a sudden and immediate blanching of the distal part of the limb with marked cyanosis and extreme discomfort and tingling but not pain. In both cases the radial pulse could be detected but was of low volume; otherwise, the hand and lower part of the forearm appeared to have no circulation, and there was deep cyanosis but no paralysis, both patients being able to move the fingers and the wrist joint normally. The reaction appeared to be confined only to the injected limb, and there was no sign of systemic upset; in both cases the reaction subsided completely within six hours, no treatment being given other than massage and the application of heat.

The first patient, a 32 year old female Chinese, had been on sulfone injection twice weekly for the past five years. The

second patient, a 52 year old male Chinese, had been on injection therapy from 1950 to 1958 when he was changed to oral DDS; he was restarted on injection therapy in 1974 and had continued on twice weekly injections. Both patients have subsequently had further sulfone injections, and there has been no repetition of the drug reaction.

The only other incidence of a similar nature occurred in 1955 to another Sungei Buloh patient, but on that occasion the reaction was very much more severe, resulting in superficial gangrene of the tips of all fingers and thumb but affecting the terminal phalanges only; they subsequently healed with minimal scarring. The patient afterwards continued sulfone injections and had no further reaction to them.

The cause of these reactions is a matter for conjecture; presumably they were triggered by intravascular injection of an arteriole in the muscle; a less likely possibility is that the injections were given too rapidly and around the radial nerve musculo-spiral canal; this unusual form of reaction to sulfone injections does not appear to have been reported before.

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