Virobis (N' N' Anhydrobis (Beta - Hydroxyethyl) Biguanide Hydrochloride) in Chicken-Pox*

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Chicken-pox (varicella) carries no conferred neonatal immunity, nor is it preventable by the injection of exposed and susceptible subjects with gamma-globulin. Once established in an institution it is extremely difficult to eradicate, particularly as new cases are always being introduced by admission from a community in which epidemics are frequent.

For some 3 years this exanthem has been endemic in a Cape Town convalescent home for Coloured infants and children, who are malnourished and who have suffered infections, especially pneumonia and gastro-enteritis. The purpose of the Home is to provide an adequate diet in the recovery phase and to ensure final discharge to their homes of children in a satisfactory nutritional state.

Though the purpose is to provide adequate nutrition it is often necessary to treat minor illnesses, but in view of the poor resistance of these malnourished children, chickenpox has often been of a severe nature and necessitated transfer to an infectious disease hospital.

THE EXPERIMENT

The incubation period of chicken-pox is usually 14 days or a little longer, with quoted extremes of 11 - 23 days. It was felt, therefore, that a single control month (November 1970) followed by a month of treatment (December 1970) should be sufficient to decide whether the disease could be eradicated.

The manufacturers† suggest that Virobis may have both prophylactic and therapeutic values, and that the drug should be given for at least 7 days and preferably 10 days. All but 2 cases received 7 days' treatment, and all but 4 at least 10 days.

During December all patients received 25 mg. Virobis 3 times a day until the disease appeared or until discharge. The weight of these children varied between 2·3 - 9·5 kg, and 75 mg a day amply covered the recommended dosage. No side-effects were observed.

RESULTS

The cases and results are recorded in Table I.

TABLE I. NUMBER OF CASES

Month	No. in the Home on 1st day of month	Admitted	Discharged	Con- tracting chicken-pox
November (control)	21	22	20	10
December (all cases treated)	23	13	22	13

During December 11 children contracted pneumonia and had to be sent back to the hospitals whence they had come and 2 died. This high incidence of respiratory disease was reflected in the general population and there seems no good reason to implicate Virobis as a factor in lowering resistance.

Of the 13 patients admitted in December, 2 developed the disease in the Home during that month, and a further 4 in January 1971. Five patients suffered chicken-pox after transfer back to hospital.

CONCLUSIONS

The attempt to eradicate chicken-pox in a Home for convalescent infants has been unsuccessful. The staff consider that the disease may have occurred in milder form, but this is not certain nor is it good enough.

Estimations of the number of crops of pocks show no difference between control and treatment months.

The recommended dose of Virobis did not succeed in eliminating chicken-pox for a closed community of children and infants. Patients presumably incubating the disease before treatment was commenced, developed the disease as usual and in the expected form.

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^{*}Date received: 31 March 1971.

[†]S.C.S. Pharmaceutical Laboratories (Pty) Ltd, Johannesburg.