Rondazol was found to be effective for the treatment of swine dysentery (SD) (Taylor 1970) used in feed or in drinking water. In this study the efficiency of intramuscular application of rondazol was tested and eventual adverse local or systemic effect was evaluated.

Materials and methods

The drug - Ten percent water solution of water soluble Ridsol (Lek, Ljubljana) containing 5% of bovine blood and 400 mg of spectinomycin per liter. The drug was injected in amenable jars with cold saltat 4°C in an atmosphere of 80% E. and 20% of CO2. They were examined on 15th day for the presence of hemorrhagic nose indicative of Treponema hyodysenteriae for 12 days.

Rats - Pigs used throughout these experiments were conventional cross-bred.

Experiment No. 1 - Preliminary trial on the effect of intramuscular application of rondazol, carried out on the large pig unit inoculated with SD. Four pigs weighing 65 kg with clinical signs of SD were used. They were treated intramuscularly with 2 ml of water solution of Ridsol. Pigs received no other treatment specific for Treponema hyodysenteriae. Rectal swabs were taken from all 4 pigs 24 hours after the first application. The 2 control pigs showed no clinical signs of SD and for the local reaction at the site of application.

Experiment No. 2 - The 3rd day of the experiment all the treated pigs clinically recovered. The 2 pigs treated only 1/4 tsp. of Ridsol showed signs of clinical symptoms. The 2 pigs treated with 1/2 tsp. of Ridsol showed no signs of SD and the local reaction at the 1st application was observed.

Experiment No. 3 - In the trial on 5 sucking pigs no local or systemic reaction was found clinically.

Experiment No. 4 - The differences in body weights between principal and controls are not significant (P 0,05). Neither systemic nor local reaction at the site of application was found clinically.

Field experiment - There was no clinically detectable local or systemic reaction in 450 sucking pigs 1-16 days old treated with Ridsol 1/2 tsp. for 4 consecutive days.

Discussion

The results obtained in experiment No. 1 and 2 indicate that 1/4 tsp. application of Ridsol is effective in treatment of SD. Pigs treated for 4 consecutive days recovered clinically within 48 hours and SD pigs could survive the intoxication endotoxin. The local application seems to have no harmful effect as shown in all the experiments, especially in experiment No. 4 and field experiment.