

ACTION OF NEOMYCIN, VIBRAMYCIN AND RONDONMYCIN UPON THE GROWTH OF *T. VAGINALIS* IN VITRO

by

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Abstract. For the tests there were used three single-clone strains of *T. vaginalis* and BWC medium made of meat broth ("Biomed-Warszawa"), liver extract, glucose and cysteine (Stępkowski, 1975). Previous to culturing the trichomonads, the medium was enriched with addition of 10% bovine serum. Antibiotics, after having been dissolved with sterile medium, were added in decreasing doses into the test-tubes containing 4 ml medium with cultured protozoan each and then put into a thermostat at 37°C. The results of the action of antibiotics were read after 6, 12, 24 and 48 hrs, the number of live trichomonads in 1 ml medium having been counted by means of Bürker's chamber.

The results showed that from among the three antibiotics used rondonmycin was most active towards *T. vaginalis*. Its destructive action in dose of 250 mcg rondonmycin/ml medium was marked already after 6 hours. With this concentration, as well as with concentration of 125 mcg/ml medium, the trichomonads completely died and broke up within 12 hours. Concentration of rondonmycin at 62.5 mcg/ml killed the culture within 48 hours. As for the two other antibiotics, vibramycin manifested some inhibitive influence on the multiplication of trichomonads only in higher concentrations, while neomycin appeared almost entirely inactive.

The discovery of the destructive action of rondonmycin towards *T. vaginalis* points to the possibility of using this antibiotic for therapeutic purposes in selected cases of trichomonadosis.

DZIAŁANIE NEOMYCYNY, VIBRAMYCYNY I RONDONMYCYNY NA WZROST
T. VAGINALIS IN VITRO

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Na podłożu BWC badano wrażliwość 3 szczepów *T. vaginalis* na działanie in vitro neomycyny, vibromycyny i rondonmycyny. Antybiotyki dodawano do 48 godz. hodowli pierwotniaków o gęstości około 10^6 /ml. Najbardziej aktywną okazała się rondonmycyna, która niszczyła pierwotniaka już po 6 godz. (250 mcg/ml). Stężenie antybiotyku 125 mcg/ml powodowało obumarcie rzesistków po 12 godz., a stężenie 62,5 mcg/ml — w ciągu 48 godz. Wpływ vibramycyny, a zwłaszcza neomycyny, na rzesistka był minimalny.

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