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# INFLUENCE OF HEN'S EMBRYO EXTRACT ON MULTIPLICATION OF *T. VAGINALIS* IN VITRO

by

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**Abstract.** The embryo extract (EE) enters the composition of many media used for culturing some protozoans. In order to determine the influence of this extract on vaginal trichomonads' capability of multiplication in vitro, media were used imitating the standard CPLM one, namely:

1. BW composed of 65% water-solved nourishing broth "Biomed-Warszawa", 33% liver extract and 2% glucose,
2. BWE, i.e. BW medium with addition of 10% EE,
3. BWC, i.e. BW medium with addition of 0.2% cysteine hydrochloride,
4. BWCE, i.e. BW medium with addition of EE and cysteine hydrochloride.

Previous to culturing the trichomonads, the media were enriched by addition of 10% inactivated bovine serum. Each of four media was supplied with the same number of trichomonads (25,000 per ml), put into a thermostat at 37°C, and the number of live protozoans was counted by means of Bürker's chamber until reaching the peak of logarithmic multiplication phase. The numbers obtained were the basis for calculating the multiple of trichomonads' multiplication in corresponding time intervals. For the tests we used three strains of *T. vaginalis* adapted to culture in vitro.

The results given, in the Table show that hen's embryo extract is an eminent growth stimulator to *T. vaginalis*, many times better than cysteine hydrochloride. Simultaneous use of both components in a medium considerably shortens the period of trichomonads' adaptation to the medium after they had been cultured, which is expressed by more intensive multiplication of the protozoans in the first 24-48 hrs of incubation. With somewhat slower rate of *T. vaginalis* fission in BWE medium, the maximum multiplication of the protozoan in that medium appeared only slightly lower than that obtained in BWCE medium.

TABLE

Multiple of trichomonads' multiplication in relation to starting culture (25 000 protozoans per 1 ml medium)

TABELA

Wielokrotność namnożeń rzęsistków w stosunku do posiewu wyjściowego (25 000 pierwotniaków/ml podłoża)

| Hrs after culturing<br>Godziny po posiewie | Kind of medium<br>Rodzaj podłoża | | | |
|---|---|---|---|---|
| | BW | BWC | BWE | BWCE |
| 24 | 1.25 | 1.5 | 2 | 5 |
| 48 | 5 | 15 | 50 | 215 |
| 72 | 60 | 80 | 220 | 280 |

BWE medium and, especially, BWCE one should appear particularly useful for detection of the presence of *T. vaginalis* in cases where the number of trichomonads is small and they themselves are little vital.

## WPŁYW WYCIĄGU Z ZARODKA KURZEGO NA ZDOLNOŚĆ NAMNAŻANIA SIĘ *T. VAGINALIS* IN VITRO

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Badano wpływ wyciągu z zarodka kurzego (EE) na namnażanie się rzęsistka pochwowego na podłożach:

1. BW (bez cysteiny oraz EE),
2. BWC (z dodatkiem 0,2% cysteiny),
3. BWE (z dodatkiem 10% EE),
4. BWCE (z cysteiną oraz EE).

Wyciąg EE okazał się silnym stymulatorem zdolności namnażania się rzęsistka, powodując ponad 2,5 razy liczniejsze namnożenie pierwotniaka w podłożu BWE w porównaniu z podłożem BWC. Nieznacznie większe namnożenie rzęsistka uzyskano w podłożu BWCE.

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