

In vitro Susceptibility Study of Essential Oils on *Tr. Vaginalis*

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INTRODUCTION

Tr. Vaginalis is a common cause, of urogenital infections both in women and men. On the other hand although essential oils have been used as antiseptic and antiinflammatory agents since ancient time, there was no any information about its possible antiprotozoal effects. The aim of the present study was to reveal a such possibility.

MATERIAL AND METHODS

Two strains of *Tr. vaginalis* isolated from two cases of acute vaginal trichomoniasis were used. Samples were taken with sterile cotton swabs and were transported to the laboratory in 2 ml of Feinberg and Whittington nutrient medium at pH 6.4. Inoculated tubes were incubated anaerobically in an Oxoid Anaerobic System at 37°C for 72 h. As a control, the successful culture of *Tr. vaginalis* was used. The antiprotozoal action for metronidazole (M) which was the reference drug and for the following essential oils: *Canella cey-*

lanicum (C), *Origanum vulgare* (O), *Thymus vulgaris* (T) and *Lavandula spica* (L), was evaluated. MIC and MLC for five different treatments for each strain were determined. MIC and MLC for metronidazole in µg/ml and for the essential oils in µl/ml were estimated.

RESULTS

	Strain	MIC	MLC
M:	I / II	0,39 / 0,39	0,39 / 0,78
C:	I / II	0,156 / 0,156	0,156 / 0,156
O:	I / II	0,312 / 0,156	0,312 / 0,312
T:	I / II	0,312 / 0,312	0,312 / 0,312
L:	I / II	0,625 / 0,625	0,625 / 0,625

CONCLUSIONS

The above results revealed that essential oils exert trichomonostatic and trichomonocidal effects and might be an alternative treatment for acute vaginal trichomoniasis.