The Effect of Using Contraceptives in Producing *Trichomonas Vaginalis* Infection in Women

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**ABSTRACT**

This study aimed to observe the effect of using Contraceptives with *T.vaginalis* infection. The study includes (100) women attended AL-Yarmouk Teaching Hospital. The study proved that (13%) were infected with this parasite. The study found that increase occurrence of infection with Trichomoniasis the women who used the Inter –Uterine device as contraceptive (61.5%) ,and the high rate of infection found in frothy discharge & bad odor (53.5%).

**INTRODUCTION**

Trichomoniasis is a type of vaginitis resulting in the inflammation and irritation accompanied by a vaginal discharge. Trichomoniasis is the result of a sexually transmitted parasite that causes an infection. A common, single cell parasite known medically as *Trichomonas vaginalis* [1].This is generally a symptomatic or only mildly symptomatic [2]. *Trichomonas vaginalis* is anaerobic flagellate, colorless, oval in shape [3].Transmittion of *T.vaginalis* is by sexual intercourse ,contaminated towels, toilet articles and prenatal towels [4].The clinical and laboratory diagnosis of *Trichomonas vaginalis* by history, physical examination, 0.85% NaCl wet papanicolaou smear, and culture [5].The intrauterine device IUD is the world wide used method of reversible birth control [6].medicated IUD devices such as a copper [7] and copper-T were developed for longer use and to lower infection rate [11].

**MATERIAL AND METHOD**

Study population:

Data from (100) infected women with vaginal discharge using contraceptive admitted AL-Yarmouk Teaching Hospital vaginal swabs were collected and wet mount Examination and using structured questionnaire.

Lab.Methods:
One drop from discharge was examined under the microscope (high power objective (40x)).

RESULTS AND DISCUSSION

As shown in table (1) there was predominance of (IUD) using over the three types of contraceptives.

Table -1: The relation between contraceptive & percent of infected women with *Trichomonas vaginalis*

<table>
<thead>
<tr>
<th>Types of contraceptive</th>
<th>Percent%</th>
</tr>
</thead>
<tbody>
<tr>
<td>IUD</td>
<td>61.5%</td>
</tr>
<tr>
<td>Oral</td>
<td>38.5%</td>
</tr>
<tr>
<td>Condom</td>
<td>0%</td>
</tr>
</tbody>
</table>

In this study the positively rate of *T. vaginalis* tended increase discharge as shown in table (2)

Table -2: Distribution according discharge color & odor

<table>
<thead>
<tr>
<th>Types of discharge</th>
<th>Percent%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frothy (white with bubbles) with bad odor</td>
<td>53.8%</td>
</tr>
<tr>
<td>Yellow with normal odor</td>
<td>38.4%</td>
</tr>
<tr>
<td>No color and no odor</td>
<td>7.8%</td>
</tr>
</tbody>
</table>

In this study the greater predominance noted in woman using IUD over than other types of contraceptives, this result is similar to other study (9)(12) were recorded that the highest rate of infection was in women that use IUD. And also we found the positively rate of *T. vaginalis* in frothy discharge, these finding was agreed with another study (10) who reported the frothy and bad smelly discharge was the biggest infection rate.

The presence of anaerobic and aerobic microorganisms, pathogenic or non-pathogenic, parasites and fungal agents in the vaginal flora have been documented by many workers one of them, Gupta reported that the use of IUD resulted in quantitative not qualitative alterations in the vaginal flora with an increase in aerobic bacterial organisms cited by(7). Regarding *T. vaginalis* and IUD usage it has been reported the *T. vaginalis* is mainly detected in IUD users. The endometrial cavity is a perfectly protected area against all microorganisms. Sagirolu reported that in the presence of IUD, macrophages get attached to the IUD in millions. Macrophages are move, rapidly and have amoeboid flexibility cited by (8). They are the most efficient phagocytic cells ingesting dead or live cells, cellular debris and the non-absorbable materials used in intrauterine contraceptive devices, These cells also produce an acid
medium an enzyme, a protease which is active and effective in an acid medium, such as the endometrial surface, thus protecting the vaginal cavity from infection (13). In several researches, it was suspected that the presence of an IUD in the uterus may increase the infection on risk because of host susceptibility, the projection of part of the device through the cervical canal is through the allow easy access of vaginal bacteria to the upper genital tract (14).

The higher infection rate of Trichomonas vaginalis was in the women who used IUD, the biggest occurance of T.vaginalist was in the women that have frothy discharge.

REFERENCES
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