Considerations Regarding Therapeutic Behaviour in Candida Vaginitis

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ABSTRACT The work draws the attention to an issue of the day regarding gynecology medical practice. There are mentioned some information items regarding candida albicans. The study refers to a group of 350 de patients with recurrent candida vaginitis. The completely different behaviour of usual antifungicals in treating this affection is presented.

KEY WORDS vaginitis, candida albicans, antifungical

Introduction

The generic term “vaginitis” reveals an inflammatory affection of the vagina, more often generated by one or several infectious agents.

In the pathogeny of this affection there may also be incriminated other factors such as chemical factors, allergic factors, physical factors etc., which are usually cofactors in determining the inflammatory process of the vagina.[2,10]

Some other authors stated that 75% of the women experienced a candida vaginitis episode during the course of their lives.[5]

Vaginal ecosystem is maintained an equilibrium state by means of a complex interaction, by the microbial metabolic products and morphological and physiological products of the vagina.[1]

The resistibility to infections of the vagina is the result of two mechanisms: acid vaginal pH and the morphological integrity of the vaginal epithelium. In addition to these mechanisms there can be mentioned vaginal transudate having anti-infectious properties, the immunitary system, etc.[3].

The symptomatology of vaginitis may present one ore several signs or symptoms. There can be mentioned:

− yellowish or greenish or clumpy vaginal discharge
− vulvovaginal prurit
− vulvovaginal smarting pain
− dyspareunia[8]

Unlike all these, candida vaginitis has distinct features. Candida albicans is a mycosis made up of microspores or myceliums.

It is considered that this affection may be manifested to 28% of the feminine population.[6]

Candidosis is the second most frequent case of vaginal infection affecting 1.3 million women in the USA.[12]

This etiological agent may also contaminate the large intestine as well as the perineal area. 85-90% of the vaginal infections are generated by candida albicans, the rest of the infections being the cause of some non albicans species, such as candida tropicalis and torulopsis glabrata.[9]

The most frequent circumstances that are favourable to the development of candida vaginitis are:

− antibiotic therapy by modifying the microbiology of the vagina
− administration of corticosteroids or cytostatics
− sugar diabetes
− pregnancy
− a recent antibiotic treatment
− usage of oral contraceptives and local spermicides by modifying the pH of the vagina
− tight clothes
− deficient immunological status (idiopathic) in which case there should be made investigations in order to detect the eventual presence of HIV.[8]

The symptomatology of candida vaginitis is materialised by:

1) white or yellowish leukorrhoea, clumpy, quite thick, odourless
2) prurit with variable intensity
3) smarting pain, dyspareunia
4) hyperemic vaginal mucus or scratching lesions
5) pains during sexual contact
6) irritation and inflammation of labia minora.[7]

The diagnosis implies the evidention of candida albicans by a smear test of the vaginal discharge and in case of infection there should be drawn cultures according to specific environments
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(Sabouraud environment) to which the fungigram is added,[11]

Our study was destined to detect the behaviour modifications of candida albicans and vaginal infections as a reaction to usual antifungicals used in nowadays gynecologic practice.[4]

The idea of realising this study started from the observation according to which there were more and more cases of recurrent candida vaginitis despite of a correctly administrated treatment.

Material and method

There have been studied a number of 350 de cases of recurrent candida vaginitis after administrating an initial treatment, the diagnosis having been previously set only on the basis of the smear test of vaginal discharge or exclusively based on cultures; following the recurrence the patients have been administrated the culture followed by the fungigram.

The patients examined were investigated as walking cases, the clinical monitorisation being realised at 1st Clinic of Obstetrics – Gynecology of the Emergency Clinical County Hospital in Craiova and at the gynecology consulting room of “Bunavestire” Polyclinic in Craiova.

The study was developed during the period 05.01.2008-05.01.2009 and the investigation was also done on the basis of the data provided by the laboratory of SC TOPMED BUNAVESTIRE SRL.

Fungigraphic testing was carried out using the following antymycotics:
1) Ketoconazole
2) Clotrimozole
3) Miconazole
4) Econazole
5) Nistatine
6) Fluconazole

There have also been used intermittently Itroconazole and Amphotericin. But because of the discontinual usage of these last two antifungicals, as well as the inadequate administration (perfusable solutions photosensitive to amphotericin), these were not taken into account.

Results

Ketoconazole was used in 350 cases. There was observed sensitivity in 291 cases (83,14%), intermediarily in 20 cases (5,71%) and immunity in 39 cases (11,15%).

Clotrimozole was used in 350 cases, there was observed sensitivity in 298 cases (85,14%), intermediarily in 41 cases (11,72%) and immunity in 11 cases(3,14%).

Miconazole was tested on 350 patients, out of which 259 (74%) proved sensitivity, 62 (17,71%) intermediarily and 29 cases (8,29%) proved immunity.

Econazole was tested on 280 patients, out of which 215 representing (76,78%) s proved sensitivity, 13 of the cases representing (4,64%) intermediarily and 52 of the cases (18,57%) proved immunity.

Nistatine was tested on 350 patients and the results were: sensitive in 73 cases representing (20,86%), in 72 cases representing (20,57%) intermediarily and in 205 cases (58,57%) immunity.

Fluconazole was tested on 350 patients and the results were: sensitive in 21 cases representing (6%), in 28 de cases representing (8%) intermediarily and in 301 cases (86%) immunity.

![Chart 1 Sensitivity to the main antymycotics](image)

Discussion

The analysis of these results requires some mentions:
- Without having the proportions necessary to demonstrate absolute results, the group that was examined still has credibility.
- There can be noticed a sufficient level of sensitivity to usual antifungicals: Ketoconazole, Clotrimozole, Econazole and Miconazole.
- Surprisingly, there can be noticed, a significant increase regarding immunity to a traditional antifungal which is Nistatine.
- In what concerns the antifungal action of Fluconazole, one of the recent antifungicals, which the specialized literature presents as being very efficient, the ascertained facts of our study are contrary. As the immunity to Fluconazole reached 85,72 % of the total cases, we consider that the investigations need more thorough examination.
In order for a treatment to be efficient, it has to be administrated concomitantly both locally and generally (orally). Thus there appear associations of antifungicals depending on their pharmacologic form.

Treating sex partners is compulsory, even in those cases where barrier methods of contraception are used (condom, etc.);

Associating antifungical treatment with an adjuvant procedure (lavage with alkaline solutions, etc.) is beneficent.

Conclusions

Candida vaginitis represents an irrefutable reality. The presence to 75% of the women of this yeast and the discomfort it generates determines us not to neglect it.

Complete investigation of patients with candida vaginitis implies also the realisation of a culture for each specific environment, followed by an antibiogram.

In the usual therapeutic arsenal there can always be found several antifungicals. Out of all these, Ketoconazole, Clotrimazole, Miconazole and Econazole have constant high levels of sensitivity (74,29%).

There can be noticed the modified behaviour of candidosis as a reaction to a traditional antifungic like Nistatine, which proved to be sensitive only in 20% of the cases.

There can be noticed an inexplicable immunity of candida albicans to Fluconazole (85,72%).

Researching the sensitivity spectrum to usual antifungicals is necessary in order to avoid treatment immunity, relapse or recurrences of this affection.

References

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