TREATMENT OF VAGINAL CANDIDIASIS USING A THREE-DAY COURSE OF TIOCONAZOLE: A PRELIMINARY REPORT

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SUMMARY

A preliminary report on the short-term use of Tioconazole for vaginal candidiasis is presented. The cure rate was found to be approximately 90% in mild degrees of the disease, with good patient compliance and minimal side effects. However no conclusion can be drawn for moderate or severe cases of the condition.

INTRODUCTION

This study was a clinical impression survey to assess the efficacy, side effects, tolerance and vaginal persistence following a three-day Tioconazole treatment of patients with vaginal candidiasis. Tioconazole 100mg vaginal tablets were used.

Pharmacology

Tioconazole is a synthetic imidazole agent with broad spectrum antimycotic activity. It has the molecular formula $C_{16}H_{13}N_2OSCl_3$ and is a white to off-white cyrstalline substance. The drug has two main modes of action: a fungistatic effect related to the inhibition of ergosterol synthesis, which is required for yeast growth which occurs at low concentrations and a fungicidal effect unrelated to inhibition of ergosterol synthesis that occurs at higher concentration.[1,2]

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METHODS

A total of 41 patients participated in this clinical impression study. The ages of the patients ranged from 21 to 49 (mean age – 35 years). Only patients having vaginal candidiasis confirmed by a high vaginal swab were included in the study.

Before entering the study, patients had a clinical history taken and a physical examination carried out together with a high vaginal swab. No attempts were made to isolate the individual candidial species.

Patients were treated with 100mg vaginal tablets for three-days. They were encouraged to complete the course even if they had subjective improvement of symptoms. Severity of the infection was subjectively assessed.

The patients were reviewed one week later and repeat vaginal swabs were done. The patients were also interviewed and the subjective and clinical assessment of response observed. Patients were considered cured when there was complete clinical and mycologic absence of infection. The

side effects experienced by the patients and their tolerance to the drug was also noted.

RESULTS

41 patients entered the study and ten were lost to follow-up. No evidence of trichomoniasis was noted in any of the patients on initial examination and on follow-up. There was no history of diabetes mellitus in any of the patients. None of the patients were pregnant. The racial breakdown of patients was as follows: 11 Malays, 20 Chinese, nine Indians and one others.

Severity of disease

Of the 41 patients in the study, 39 had minimal vaginal discharge; these were categorised as mild degrees of vaginal candidiasis whilst two others who had thick curdy discharge with intense pruritis vulvae and vulvitis were categorised as having severe disease. The latter patient required application of Tioconazole dermal cream for associated vulvitis.

Efficacy

Of the 31 patients who were followed-up one week later, 28 patients were cured of the disease. One patient with mild disease had partial response subjectively and was given a second course of Tioconazole and she was lost to follow-up.

One of the patients with severe vaginal candidiasis also had partial response and had a second course of Tioconazole and she was also lost to follow-up. The other patient with severe disease had absolutely no response subjectively or objectively. She also developed hypersensitivity reaction to the drug; however she responded to a 14-day course of Nystatin vaginal pessaries.

Side effects

Of the 31 patients who were reviewed, 30 patients had absolutely no side effects. Only one patient with severe candidiasis presented with problems. She developed vulval irritation, swelling of the clitoris and edema of the labia. This was thought to be drug-related, requiring cessation of therapy with Tioconazole.

Toleration

Tolerance to the drug treatment was assessed subjectively. Three patients found the drug excellent compared to other previous treatment modalities they had had. 27 other patients found their tolerance to be good. The single patient who developed hypersensitivity reaction did not tolerate the drug.

DISCUSSION

In the present study, it has been shown that the application of Tioconazole 100mg vaginal tablets daily for three days provides relatively safe and effective treatment for vaginal candidiasis. Cure rate of 93% has been reported by others.[3] The apparent cure rate of 90.3% observed in our study must be guarded as there were ten defaulters, who could have been either cured or sought treatment elsewhere because of no improvement. The authors, however, feel the former most likely. The high cure rate observed is important as many patients who are on long-term therapy for vaginal candidiasis discontinue treatment prematurely, once they experience relief of symptoms. Thus short-term therapy is beneficial as patient compliance is a frequent problem in clinical practice.

One patient in this study developed hypersensitivity reaction as evidenced by severe local reaction to the vulva and clitoris. Thus as in any drug therapy, a history of allergy will contraindicate its use, and should allergic reaction develop during its use the drug should be stopped immediately.

Although this preliminary study involves a small number of patients, Tioconazole, a new imidazole derivative appears effective for mild cases of vaginal candidiasis. The very minimal side

effects, good patient tolerance and compliance are encouraging. However no conclusion can be drawn for moderate or severe cases.

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