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 $C_{16}H_{13}N_2O$S$Cl_3$ and is a white to off-white crystalline 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.\(^1\)\(^2\)

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 examina-
tion 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 objec-
tively. 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 defaul-
ters, 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,
thus they experience relief of symptoms. Thus
short-term therapy is beneficial as patient com-
pliance is a frequent problem in clinical practice.

One patient in this study developed hyper-
sensitivity reaction as evidenced by severe local
reaction to the vulva and clitoris. Thus as in any
drug therapy, a history of allergy will contra-
indicate 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.

REFERENCES

