FLAGYL IN THE TREATMENT OF TRICHOMONAS VAGINITIS

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The problem of excessive vaginal discharges is faced by all gynaecologists and it forms a major problem in all gynaecological out-patient departments.

It is strange that even with advancement of knowledge the backward group in our country still belives it to be a major cause of a number of diseases in women. Its proper diagnosis and treatment therefore assumes great importance.

Since the discovery of trichomonas vaginalis by Donne, in 1936, it has been found that in a large number of cases it is the causative agent. Treatments have changed their forms, to eradicate this, from green soap and water cleansing agents to trichomonicidal agents, e.g. mercury compounds, arsenic derivatives, quinine and antibiotics administered locally. Immediate success was recorded in the relief of symptoms by almost all of these, but complete cure could not be obtained due to presence of trichomonas in other sites than the vagina Skene's tubules, Bartholin glands, urethra, as also reinfection. Oral systemic treatment with Aureomycin and Britheon, has been tried

but the results have not been uniformly gratifying.

With the advent of Flagyl (May & Baker Ltd.) a derivative of Nitrocindiazole, namely 1-B hydroxyethyl-2-methyl-5-nitro-cindiazole by Cosar and Julou (1959) improvement in the treatment of trichomonas vaginalis has been seen. It is a systemic trichomonacidal drug which can be used in males and females both, thus reinfection from the infected male partner can be avoided.

Due to a large number of cases of leucorrhoea attending the gynaecological outpatient department of S.N. Hospital, Agra, it was dicided to treat the cases of trichomonas vaginalis with Flagyl.

Material and Methods

Forty-two cases, suffering from trichomonas vaginitis, were treated with flagyl 200 mgm. thrice a day orally for 10 days. The diagnosis was established by fresh smear and culture of the discharges on C.P.L.M. (cysteine, peptone, liver infusion, maltose medium) staining for grading of vaginal flora; pH of vagina was determined in every case; complete blood pictures were done in every case. The patients were followed up

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for three months after completion of form of urticaria. In no patient treatthe treatment. The follow-up checkups were done after 48 hours' treatment, on completing the treatment and subsequently every fortnight. Fresh smears and cultures were repeated on every visit. All the patients were asked to refrain from coitus during the treatment and to send their male partners for examination. Only 28 males were examined, 10 males were found to be positive and were treated with flagyl, 200 mg. thrice daily for ten days.

Observations

Out of 42 patients treated with flagyl, 4 patients showed no response to flagyl after 10 days' treatment. The remaining 38 showed symptomatic relief from the third day onwards and were completely symptom free in 10 days' time.

Twenty-nine cases could be followed up for a period of 3 months or more; 3 patients showed reinfection while 13 patients defaulted during the period, thus reducing the success rate at 3 months' follow-up to 75.8%. The defaulted patients were negative on a check up before the default.

The 4 cases of immediate failure were treated with flagyl and were found to be symptom free before the second course ended.

Side effects

Bitter taste in month, loss of appetite, weakness, pain in abdomen, constipation, headache, giddiness, diarrhoea, pain in legs, nausea, flushing of face and dryness of mouth were seen in a few cases; only one

ment had to be discontinued due to side-effects. However fungal infection after treatment was common which accounted for 26%.

Symptomatic Relief After the Treatment

Out of 42 cases treated with flagyl 30 cases, or 71.4%, were free from discharge, 6 cases, or 14.3%, much improved, 2 cases, or 4.8%, slightly improved; 4 cases of pruritus were free of symptoms at the end of the treatment and 2 cases or 11.1% were much improved. The urinary symptoms disappeared in 16 cases or 94.1% and improved in one case or 5.9%.

TABLE I

	No. of Cases	Success Rate	Failure Rate	
Immediate	42	38 (90.5%)	4(9.5%)	
At 3 months	29	22 (75.8%)	7 (24.2%)	

TABLE II

Details of 24 Defaulters Among 50 Patients Treated with Flagyl

No. of patients	Time of default			Test for T. Vaginalis
8	Never came for			
	follow-up			_
8	2	Weeks		- 1
2	4	Weeks		Both negative
5	6	Weeks		All negative
3	8	Weeks		77
3	10	Weeks	,	99
-	12	Weeks		2

One patient continued to complain of discharge per vaginam, though no fungus and trichomonas were detected, on fresh smears and culture case had an allergic reaction in the examination at repeated check up. On tracing the history, the patient was psychologically upset and most probably this was the reason for her discharge per vaginam; 26% of the cases showed monilial infection after the treatment with flagyl.

Comments

Forty-two patients were treated with flagyl primarily. The immediate success rate in the series was 90.5% and failure rate was 9.5%. The success rate at three months of follow-up was 75.8% and failure rate

24.2% per cent.

The immediate success rates reported by other authors are higher than in our series; by Menon and Willmott (1962) 100%, King (1960) 95%, while lower rates than in our series are reported by Mcgill and Isabel (1962) 87% and Keighly (1963) 76.6%. Our immediate results correspond with Joseph et al. 1963 (62%).

Results at 3 months of follow-up by other authors 'are 85.3% Willcox, Narang (1903) 91,3% and Menon and Willmott (1962) 56.3%.

The failure of response to flagyl can be due to taking the drug irregularly. The inadequate absorption could not be assessed, as estimation of the drug was not done in serum and urine in our series. Thus in our series the failure with flagyl could be due to inadequate absorption in cases of immediate failure and reinfection in later cases on follow up.

One case had no history of coitus and she continued to have trichomonas both in fresh smears and culture even after 2 courses of flagyl. She had taken the drug regularly. In this case possibility of failure could be due to inadequate absorption or resistant strains to flagyl.

Monilial infection was seen in 26% of the cases treated with flagyl. This shows that flagyl has got no effect

on monilial infection and it should

be taken as an index rather than a side effect of flagyl.

Due to very few side-effects it can be used safely in cases of females and males; reinfection can be checked from the infected male partners.

Summary and Conclusion -

1. Forty-two cases suffering from trichomonas vaginitis were treated with flagyl 200 mg. thrice a day for 10 days.

2. Diagnosis was made by fresh smears Gram's and Giemsa's staining

and by culture method.

3. The immediate success rate was 90.5%, the success rate at 3 months

of follow up was 75.8%.

4. One patient (2.45%) continued to have discharge per vaginam though there were no trichomonas or monilia in the discharge, possibly due to psychological effect.

5. One patient (2.45%) continued to have trichomonas even after 2 courses of flagyl without any history of coitus and inadequate taking of drug; possibly it was due to inadequate absorption.

6. Monilial infection was seen in 26% of the cases after treatment with

flagyl.

7. Very few side-effects were seen 8. No leucopaenia was seen in any

of the case.

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References

- Cosar, C., and Julou, L.: Ann. Pasteur. 96: 238, 1959.
- 2. Donne, M. A.: Canpt., rend., Acad., Sci., 3: 835, 1936.
- Joseph, B., Telon, M.D. & Nancy,
 C. Jreodwell: Obst. & Gynec. 21:
 356, 1963.
- 4. Isabel McGill. M.: Am. J. Obst. &

- Gynec. 83; 1284, 1962.
- Menon, M. K. K. & Willmott, M.: J. Obst. & Gynec. India 12: 333, 1962.
- Rodin, P., King, A. J., Mico, C. S.
 & Barrow, J.: Brit. J. Vener. Dis.
 36: 147, 1960.
- Willcox, R. R.: Brit. J. Vener. Dis. 36: 163, 1960.