

TO ASSESS THE RECURRENCE RATE OF HERPES GENITALIS IN YOUNG MALE SUFFERERS, WHO ARE TREATED WITH ACYCLOVIR

Dr. Atishay Bukharia¹ (Asst. Professor), Dr. Surendra Singh Bhati² (Associate Prof.), Dr. Rohini Chouhan³ (Asst. Professor) & Dr. Shivank Shrivastava⁴ (Asst. Professor)

^{1&4}Dept. of Dermatology, Venereology & Leprosy, AIMS, Dewas, M.P.

^{2&3}Dept. of Dermatology, Venereology & Leprosy, Index Medical College, Indore, M.P.

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Corresponding author: Dr. Atishay Bukharia

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Abstract

Background & Method: The aim of this study is to assess the recurrence rate of herpes genitalis in young male sufferers, who are treated with acyclovir. Eligible participants were randomized in two groups group A (Cases – Given continuous oral zinc supplementation (tab. Zinc acetate 50 mg once daily). Each episode of herpes genitalis was treated with 5-7 days course of acyclovir. Acyclovir was given in the dose of 400 mg tds.) and group B (Controls - Given only acyclovir during episodes). Tzanck smear was done in each patient and was assessed by one of the consultant throughout the study. Routine investigations and HIV, HbSag, VDRL were mandatory.

Result: In group A, when the number of episodes during the last year was compared with the number of episodes during the study, a reduction in number was observed but this difference was non-significant. In group B also the mean number of episodes has also decreased slightly which is statistically non-significant.

Conclusion: Regular treatment with systemic zinc acetate in dose of 50 mg per day in patients with recurrent Herpes genitalis along with episodic treatment with antiviral (Acyclovir) able to reduce recurrence rates by 15% and duration by 20% after one year.

Keywords: recurrence, herpes, genitalis & acyclovir.

Study Designed: prospective randomized case control study.

Introduction

The word herpes has been used in medicine for at least 25 centuries. Genital herpes was first described by the French physician John Astruc in 1736, and the first English translation appeared in his treatise on venereal disease in 1754[1]. The disease also appeared to be well recognized by the venereologists of nineteenth century. In 1893 Unna diagnosed genital herpes in 9.1% of 846 prostitutes visiting his infirmary[2]. In 1886 Diday and Doyon published the monograph *Les Herpes genitaux* in which they observed that genital herpes often appeared after a venereal infection such as syphilis, chancroid, or gonorrhoea. They also described cases of recurrent genital herpes[3].

The reported prevalence of genital herpes depends upon the demographic and clinical characteristics of the patient population studied and whether clinical and/or laboratory techniques are used for diagnoses[4].

As such, there are great differences in the prevalence of HSV-1 and HSV-2 infection versus the frequency of symptomatic genital and oral-labial herpes seen by medical practitioners. HSV has been isolated from 0.3% HSV-2 has been shown to be the dominant cause of

genital ulcer disease both in developing and developed countries. In Africa, the Far East and the United States, genital herpes is from 2 to 10 times more common than other infections in genital ulcers.

Several studies have described couples in which HSV-2 has not been transmitted despite frequent sexual activity. Whether this is due to Women have higher rates of acquisition than men; in one study the attack rate among seronegative women approached 30% per year[5].

Material & Method

This study protocol was conducted at AIMS, Dewas & Index Medical College, Indore, M.P. from Oct 2017 to Sep 2018. The participants were recruited from outpatient facility of Department of Dermatology, Venereology & Leprosy. At the time of recruitment all the participants were instructed to come for follow up as soon as they observed the episode of genital lesions.

Eligible participants were randomized in two groups group A (Cases – Given continuous oral zinc supplementation (tab. Zinc acetate 50 mg once daily). Each episode of herpes genitalis was treated with 5-7 days

course of acyclovir. Acyclovir was given in the dose of 400 mg tds.) and group B (Controls - Given only acyclovir during episodes). Tzanck smear was done in each patient and was assessed by one of the consultant throughout the study. Routine investigations and HIV, HbSAg, VDRL were mandatory.

Inclusion Criteria-

- Subjects with herpes genitalis diagnosed clinically by painful grouped vesicles, pustules, erosions

- Age between 18-40 years

Exclusion Criteria-

- Patients with immunocomprised state
- Following high risk behaviour subjects – Male sex with male , IV drug abusers, truck drivers
- Subjects not giving consent

Results

Table 1: Description of Addiction and Habits among study participants

| Sr. No. | | CASES | CONTROLS |
|---------|--------------------------------|-------|----------|
| 1 | Alcohol | 08 | 09 |
| 2 | Alcohol + smoking | 06 | 04 |
| 3 | No addiction | 07 | 08 |
| 4 | Commercial sex worker exposure | 09 | 06 |

Table 2: Description of number of episodes during last one year & episodes during study in group B.

| | Group B (Control) | |
|--|-------------------|----------|
| | Mean | SD |
| Number of episodes during last year | 5.96 | 0.748989 |
| Number of episodes during the study period | 5.44 | 0.627432 |

Table 3: Relation of number of episode during last one year and number of episode during study period.

| | Group | Group |
|---|--------|--------|
| | A | B |
| Mean number of episodes during last year | 5.1267 | 5.6314 |
| Mean number of episodes during study period | 4.8893 | 5.9955 |
| P value | 0.963 | 0.544 |

In group A, when the number of episodes during the last year were compared with the number of episodes during the study, a reduction in number was observed but this difference was non-significant. In group B also the mean number of episodes has also decreased slightly which is statistically non-significant.

Discussion

Few studies are available to assess efficacy of zinc supplementation in recurrent Herpes simplex viruses, Study on effect of topical ZnSo4 in Herpes genitalis by BB Mahajan[6] et al showed reduction in recurrence of Herpes genitalis after application of 4% ZnSo4 for 6 months. Study by F. Femiano et al also showed similar

reduction in recurrence and duration of Herpes Labialis. Side effects observed in these studies were local irritation, nausea, diarrhea and abdominal discomfort. Zinc is very well tolerated in our study. However it required prolong continuous consumption to show its beneficial effects [7&8].

Conclusion

Regular treatment with systemic zinc acetate in dose of 50 mg per day in patients with recurrent Herpes genitalis along with episodic treatment with antiviral (Acyclovir) able to reduce recurrence rates by 15% and duration by 20 % after one year.

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