Research Article

The comparative study between the efficacy of high dose of acyclovir and erythromycin on pityriasis rosea

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Abstract

Pityriasis Rosea or PR is a commonly encountered papulosquamous disorder, which is self limiting in nature. Researchers believe of its infective origin, either bacterial or viral. **AIM:** To compare the treatment efficacy with Erythromycin to antiviral agents Acyclovir in PR. **Methods:** Clinically confirm cases of PR without any contraindication to above mentioned treatment regimen were taken for study. They were divided into two groups. One group took erythromycin and another group took Aclycovir. Al the patients were examined at two, four, eight weeks of the commencement of study and followed for another few months. **Results**: Total 23 male, 27 females patients were successfully completed the study. After eight weeks 22 patients in Aclycovir group and 10 patients in Erythromycin group respectively showed complete response. Symptom like pruritus control faster in Aclycovir group. No cases showed any adverse drug reactions. **Conclusion:** Higher dose of oral Acyclovir was a safe and effective treatment for PR but age and sex matched controlled study with larger sample volume is required for confirmation of our observation.
Key words: Pityriasis rosea, Acyclovir, Erythromycin

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INTRODUCTION

Pityriasis rosea (PR) is an acute inflammatory self limiting exathematous disease of skin. It typically begin as a single thin oval scaly plaque known as herald patch, followed be oval papulosquamous lesion on the trunk and proximal extremities. The incidence of PR is more during the spring and the fall in temperature climates[1]. The incidence varies from 0.39[2] to 4.80[3] per 100 dermatological patients, and the young populations are mostly affected. Though the etiology remain unknown, an infectious etiology has been suggested for PR on the basis of immunologic and histologic data[4-5], and now it is believed HHV-6 and HHV-7[6-8] are the possible causes. Certain drugs like Captoril, Metronidazole, Penicillamine, Arsenic, Gold etc also have been implicated in the etiology of this disorder. PR lesions resolve spontaneously within 2 months. To accelerate clearing few modalities of therapy have been implicated. UVB therapy is beneficial in decreasing both the pruritus and the extent of eruption in more severe disease[9]. A doubled blind placebo controlled study of 90 patient demonstrated that oral Erythromycin in a dose of 250 mg four times daily in adults and 20-40mg/kg in four divided doses in children (for 2 weeks) was effective in improving PR in 74% of treated patient and not in placebo group[10]. Considering the viral etiology, Acyclovir and other antiviral agent may be considered. In another placebo controlled study of 87 patient treated in Acyclovir 800 mg five times daily for one week or placebo regression on day 14 was 79% in Acyclovir group compared to 4% in the placebo group[11] recent study by Amirrhooshang Ehsani *et al*[12] shows higher response to high dose of Acyclovir in comparison to high dose of Erythromycin. Surprisingly member of study was scanty to compare the

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efficacy of these two drugs. The aim of our study is to compare the efficacy between widely used Erythromycin and newly introduced therapy with Acyclovir in PR. The study is a randomized control trial and was carried out at the Department of Dermatology and Venereology of Calcutta National Medical College, Kolkata – 700014 for a period of one year from January 2011 to December 2011. Those patients who attended the OPD with generalized PR were enrolled for the study. Only adult patients who came early were taken. Informed consent was taken from all selected patients. Pregnant women, Lactating women, those who have severe systematic disease and those who have history of sensitivity of Acyclovir and Erythromycin were excluded from the study. VDRL test was done and those who have history of unprotected sexual exposure. The patients were randomized into two groups Group A and Group B. group A were prescribed high dose of Acyclovir (800mg 5 times daily for 10 days). Both the medicines were provided with some packaging. The patients were followed up at 2 weeks, 4 weeks and 10 weeks evaluate the response with reference to improvement of pruritus, resolution of old lesion and appearance of new lesion, increase and decrease of erythema and scaling. Lesion counting was done at every visit. The response are categorized as

a. Complete response: No new lesions, as well as disappearance of some old lesions
b. Partial response: Regression or disappearance of some old lesion and appearance of few new lesion
c. No response: No regression with reappearance of new lesions

50 patients completed the study and 10 patients were lost in follow up.

RESULTS

Total 60 patients were included in our study. The average of patients was female and male and female ratio is 2:3 and 1:1 in group A and group B respectively. All patients had symptoms of pruritus at the starting of the therapy. Erythema and scaling were of different degree. Total 10 patients were lost at some period of follow up. So we were able to calculate the result in 50 patients. Pattern of response to drugs: At 8th week of follow up 22 patients of Acyclovir group (Group A) showed complete response compared to 10 patients with Erythromycin group (Group B). Partial response was observed in 3 patients and 15 patients in group A and group B respectively. All patients except one experienced improvement of pruritus with time. Improvement of pruritus was rapid in Acyclovir group. One patient in Erythromycin group complained exacerbation of pruritus at 4th week of visit, but it resolved significantly at 8th week. Some patients in both the groups attended OPD during their drug intake with complain of nausea vomiting etc, but the symptoms subsidized with simple prescription of some antiemetic, H_2 blocker or with some counseling regarding timing of medicine intake.

DISCUSSION

In the present analysis based on data of 50 evaluable patients Acyclovir showed complete response at 8th week in 22 patients out of 25 patients who received the medicine. Complete response was observed in 10 patients out of 25 patients who received erythromycin at the 8th week follow up. This study is consistent with previous study by Drago F, Vecchio F *et al* in 2006[11], Amirhooshang Eshani, Nafiseh Esmaily *et al* in 2010[12] and Bukhari A in 2008[13], Rasi A, Tajziehchi L *et al* 2008[14]. Early response in terms of complete response at 2 weeks was observed in two patients of Acyclovir group and 1 patient in Erythromycin group. This is comparable to study done by Amirhoosang Ehsani *et al* (2010)[12] and contrary to some other trails[10,11,15]. Relief of pruritus with time is seen in almost all patients in both groups, Acyclovir group showed early relief in significant number of patients. This is again in agreement with study by Amirhoosang Ehsani *et al* (2010)[12]. As we have already told that there is enough evidence of Herpes virus-6 and -7 as etiologic agent of PR[7,8]. The disease responds very well with antiviral Acyclovir therapy, specially with high dose. So we conclude Acyclovir in higher dosage may be safe and effective treatment for PR, but study with higher sample size is needed to confirm the efficacy further.

Table 1: Baseline Demographic

Parameter	Acyclovir	Erythromycin
No of patients	25	25
Male/Female	2:3	1:1
Age [Mean ± SD]	25.1 ± 11.6	21 ± 6.4

Table 2: Response to Acyclovir and Erthromycin

	2 weeks		4 weeks		8 weeks	
	A	E	A	E	A	E
Complete	2	1	10	3	22	10
Partial	16	8	11	18	3	15
No	7	16	4	4	0	0
Pruritus	3	10	0	4	0	2
Total	25	25	25	25	25	25

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