

Comparison between Cardiospermum Gel and existing Eczema Treatments - A Consumer Study.

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Date 29th of September 2004

Abstract

A preparation of Cardiospermum Gel was examined for its effects in helping dry skin conditions. A trial was conducted to compare this product with existing eczema treatments in a randomly selected group of respondents.

Key words: eczema, treatment, Cardiospermum Gel

Introduction

Cardiospermum Gel is a commercial name for a gel preparation containing a tincture of the plant cardiospermum, whose common name is Balloon Vine.

Volunteers for this study were recruited by the placement of advertisements in newspapers. They were initially asked questions about the effectiveness and tolerability of their existing eczema treatments and subsequently about the treatment under test. Statistics were analysed using Decision Analyst 1998 Stats TM package using a test for difference between two independent means.

Respondents and Methods

The respondents were randomly selected and so no attempt was made to control the existing treatments. They were given specific instructions regarding the situations in which to use the preparation under trial. A copy of these instructions is included in the appendix. They were essentially told to use the test preparation only on a new outbreak which had not previously been treated with their existing treatment. After a period of one month of using the Cardiospermum Gel they were again questioned by telephone by an experienced call centre operatives. The call centre operatives were unaware of the substances that were under test. Full details of the protocol under which they operated is attached in the appendix. No attempt was made to blind the subjects to the treatment they were using.

50 people responded to the advertisements. The average age was 30.3 years and the range of ages was from four to 55 years. No attempt was made to control for any socioeconomic variables. The existing treatments which were being used for eczema are listed below.

Steroid cream: 28 subjects

Emollient: 10 subjects

Assorted herbal and other remedies, some unknown 12

The preparation was used on the body, arms, legs and face.

Respondents were asked to allocate a score between zero and 10 in response to a range of questions. These are listed below.

- With respect to your existing treatment what score do you give it for pleasantness of use?
- With respect to your existing treatment how effective do you find it?
- With respect to the treatment under test how pleasant do you find it to use?
- With respect to the treatment under test how effective do you find it?
- With respect to the treatment under test would you continue to use it as a treatment for your eczema?

Testing Pleasantness

	Mean score	Range	Variance(a measure of agreement)	Probability that difference is significant
Existing treatment	5.36	9	2.48	99.99%
Cardiospermum gel	7.96	4	1.3	

Testing Efficacy

	Mean Score	Range	Variance(a measure of agreement)	Probability that difference is significant
Existing treatment	5.7	8	1.7	27%
Cardiospermum Gel	5.86	10	7.3	

Overall 33 respondents (66%) said they would probably continue to use the Gel.

Conclusions

There was good agreement amongst the subjects that Cardiospermum Gel was more pleasant to use than the existing basket of treatments. The narrow range of scores and the low value for variance reflect this. Statistical analysis indicated that the difference in assessment of pleasantness was highly significant.

When comparing the gel against existing treatments there was not the same degree of consensus over its effectiveness. This is reflected in the wide range of scores and a high value for variance. In practical terms this means that it seemed to work well for some people but had no effect in others (some 10's but also some 0's). The mean score however was not dissimilar to that of existing treatments suggesting that overall it was rated as effective as existing treatments. There was a low probability that any difference was statistically significant.

Discussion

Taking into account that 56% of the test subjects were using a steroid preparation on their eczema, the fact that the gel appeared to be as effective overall as other treatments is a finding worthy of further investigation. To my knowledge the gel has no known side-effects. The side-effects of steroid treatment are well known and can include infection and thinning of the skin. Many patients fail to use a moisturising preparation regularly on the skin which could help to prevent eczema. This is likely to be a consequence of the fact that they find such preparations messy and unpleasant to use.

As Cardiospermum Gel can be shown to be as effective as a basket of other treatments and at the same time is significantly more user-friendly and has a low risk of side-effects, there seems to be a compelling argument to encourage its use and to pursue further research into its effectiveness and mode of action.

The high value for variance with respect to effectiveness for Cardiospermum reflects one of the difficulties in carrying out a trial of this kind. Firstly there is likely to be a wide range of biological responses to a new preparation. Secondly the existing treatments had already been through a 'filtering process' – presumably respondents used their existing treatments because they had found them to be effective in the past and so one would anticipate a greater degree of consensus over their effectiveness. Perhaps a better comparison would have been between randomly chosen treatments and the new treatment under test. To undertake a study of that kind would however require a much greater input both in design and analysis and would perhaps be unethical in that it would expose respondents to the possibility of reacting adversely to a previous treatment which they may have tried and found to be ineffective or to have caused a reaction.