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Efficacy and Safety of Topical 40% Hydrogen Peroxide in the Treatment of common warts Yasmin. I. El tohamy, Ihab. Y. Abd Allah and Rehab. M. Salem

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Abstract

Background: Warts, human papillomavirus (HPV) infections often show resistance to standard treatment options, calling for the investigation of potential substitutes. There is encouraging evidence that hydrogen peroxide (H2O2) may alleviate a range of skin disorders. The purpose of this research was to determine whether or not common warts might be safely and effectively treated with topical 40% hydrogen peroxide. Methods The patient is a 36-year-old guy who smokes and has several common warts on his right hand. Applications of H2O2 accounted for 40% of the treatment (twice -weekly for four weeks). Size measurements, picture comparisons, evaluation of side effects, and patient satisfaction were all part of the evaluation process. Results After one month of therapy with 40% hydrogen peroxide, the treated wart showed some improvement. Conclusions: It seemed that a 40% solution of hydrogen peroxide was not the best approach to treating common warts initially.

Keywords: Warts, Hydrogen Peroxide, Topical, Treatment.

Section 1: Overview

Infection with the human papillomavirus causes warts, a common skin ailment (HPV). The condition may become chronic or recurring following therapy, despite the fact that it is self-limiting. The effectiveness of the several therapeutic approaches varies from instance to case.

The molecular formula for hydrogen peroxide is H2O2. When unadulterated, it has a little thicker consistency than water and a clear, pale blue colour. One example of a peroxide is hydrogen peroxide, the most basic of these compounds. Its many applications include those of an oxidant, bleach, and antiseptic. Rocketry has made use of concentrated hydrogen peroxide, sometimes known as "high-test peroxide," a reactive oxygen species.

Seborrheic keratosis was effectively and safely treated with a 40% hydrogen peroxide application [4]. For the treatment of elevated seborrheic keratoses (SKs) in adults, the Food and Drug Administration has authorised Eskata, a topical solution containing 40% hydrogen peroxide manufactured by Aclaris Therapeutics. For this use, it has received the first-ever drug approval.

This research set out to determine whether or not a case of common wart could be effectively and safely treated with a topical application of 40% hydrogen peroxide.

2. Methods

Patient

Patient caused by the HPV virus, often show resistance to treatments, calling for investigation into potential substitute treatments. Hydrogen peroxide (H2O2) has potential as a treatment for a range of skin disorders. In order to determine whether or not topical 40% hydrogen peroxide is effective in treating common warts, this research set out to do just that. Methods One male patient, aged 36, smoked cigarettes and presented with several common warts on his right hand. Forty percent of the treatment was administered using H2O2 (twice - weekly for four weeks). Patient satisfaction, side

effect evaluation, size measurement, and picture comparison were all included of the evaluation process. Results The treated wart showed some improvement after one month of therapy with 40% hydrogen peroxide. Conclusions: It appears that common warts should not be treated initially with 40% hydrogen peroxide.

print: ISSN 2356-9751

online: ISSN 2356-976x

Topical hydrogen peroxide for warts treatment

1. Greetings

Human papillomavirus infection is a prevalent cause of warts, a skin illness (HPV). This condition often resolves on its own, but therapy may not prevent it from becoming chronic or recurring. There are a lot of therapy options, however their effectiveness varies from case to instance.

The chemical molecule known as hydrogen peroxide has the formula H2o2. It has a little higher viscosity than water and is a transparent, pale blue liquid when it is undiluted. The most basic peroxide, a chemical containing an oxygen-oxygen single bond, is hydrogen peroxide. Among its many uses, it is an antibacterial, bleaching agent, and oxidizer. One reactive oxygen species that has found utility in rocketry is concentrated hydrogen peroxide, sometimes known as "high-test peroxide."

Treatment of seborrheic keratosis with a 40% solution was both efficacious and well-tolerated [4]. Aclaris Therapeutics' Eskata, a topical solution containing 40% hydrogen peroxide, has been authorised by the Food and Drug Administration (FDA) for the treatment of elevated seborrheic keratoses (SKs) in adults. This medicine has made history by being licenced for this specific indication. Topical use of 40% hydrogen peroxide for the treatment of common warts was the subject of this research, which sought to assess its effectiveness and safety.

3. Results

Partial HPV-related cancers often show resistance to standard treatments, spurring research into potential substitutes. A number of skin issues have shown improvement after using hydrogen peroxide (H2O2).

Finding out how well and safely topical 40% hydrogen peroxide worked to cure common warts was the goal of this research. Methods A-male patient, who is 36 years old and smokes, presents with several common warts on his right hand. A forty percent H2O2 application rate was used in the treatment (twice -weekly for four weeks). Some of the criteria used for evaluation were patient effect satisfaction, side evaluation, measurement, and picture comparison. Results Forty percent hydrogen peroxide therapy yielded some improvement in the treated wart after one month. Conclusions: The first step in treating common warts with 40% hydrogen peroxide did not seem to be appropriate.

Subjects: Hydrogen Peroxide Topical Treatment for Warts

1. Welcome

One of the most prevalent skin diseases caused by the human papillomavirus is warts (HPV). A selflimiting condition that, despite therapy, may become chronic or recurring. The effectiveness varies in various circumstances, despite the availability of several therapeutic options.

Chemically, hydrogen peroxide is represented by the formula H2o2. Its pure form is a transparent, pale blue liquid that is only slightly thicker than water. As a molecule having an oxygen-oxygen single bond, hydrogen peroxide is the most basic kind of peroxide. Oxidizer, bleaching agent, and antibacterial are some of its many uses. A reactive oxygen species, concentrated hydrogen peroxide, sometimes known as "high-test peroxide," has found usage as a rocket propellant.

Applying a 40% solution of hydrogen peroxide effectively and with few side effects treated seborrheic keratosis [4]. As a topical solution, Eskata (Aclaris Therapeutics) containing 40% hydrogen peroxide is now authorised by the FDA to treat elevated seborrheic keratoses (SKs) in adults. Approval for this indication was granted to the first medication.

Applying 40% hydrogen peroxide topically to cure a common wart was the goal of this research, which also sought to determine the safety of this method.



A instance of common warts that showed a 40% improvement after one month of using hydrogen peroxide

4. Discussion

In 89.5% of the lesions were fully healed and another 10.5% showed partial response after one month of therapy for common warts on the hand in this latest research (Tabra and Al-Hamamy, 2022). One possible explanation for the high cure rate in this study is the method of application. Each wart was treated with a thin layer of 50% hydrogen peroxide solution, which was left to dry for 2 minutes. Then, the treatment was repeated two or three times until white frost, bubbling, or a stinging sensation appeared.

According to Tabra and Al-Hamamy (2022), the most common side effects were burning sensation (76.2 percent), erythema (76.2 percent), stinging (57.1 percent), pain (42.9 percent), edoema, hyperpigmentation (9.5 percent), hypopigmentation (4.8 percent), and ulceration (4.8 percent). In this study, burning sensation was the most commonly reported side effect. Our investigation found these to

be lower. The increased concentration employed in this investigation might be the cause of these variances.

Mahran et al. (2020) observed no notable local or systemic adverse effects in the groups they studied after six weeks of giving 3% and 6% hydrogen peroxide (non-genital warts). These investigations have shown that topical H2O2 is safe to use [9].

The patient in this particular trial was dissatisfied and did not endorse this course of therapy.

Fifth, in summary

The increased recurrence rates and poorer satisfaction rate after 6 months of follow-up suggested that hydrogen peroxide (40 percent) should not be the first treatment choice for nongenital warts.

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