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Case Report

The Extract of *Alhagi graecorum* in Olive Oil in the Treatment of Herpes Zoster (Shingles): A Case Report Study

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Abstract

Introduction: Herpes zoster (also called shingles) has an increasing prevalence as population ages. Its pathogenesis involves the activation of Herpes Zoster Virus (HZV).

Case study: A married female patient with the age of 19 years was diagnosed to have a clinical HZV by a dermatologist. Some medicines were prescribed for her including viromer (800 mg, 3 times a day for 5 days). According to the patient, no improvements were observed as she was using this medicine. The patient asked for other therapeutic options. After 10 days, she was advised to use the extract of *Alhagi graecorum* in olive oil. It was topically used over 10 days. The patient reported positive effects of its use after two days since itching became less painful and the lesion started to disappear slowly. After 10 days of using the extract of *Alhagi graecorum* in olive oil, the lesion had been disappeared.

The clinical presentation of shingles as vesicles was described to diffuse and become as one layer within the first 5 days, and this layer further completely disappeared. Finally, the patient and her husband expressed their happiness to successful treatment and improving their quality of life.

Conclusion: The extract of *Alhagi graecorum* in olive oil has been used successfully in the treatment of a female patient with HZV. This is a new promising therapeutic option which can be further improved using appropriate extraction methods.

Keywords: *Herpes Zoster Virus; shingles; Alhagi graecorum*

Introduction

Varicella zoster (VZ) is induced by the varicella zoster virus (VZV) following initial infection which impacts the skin and its sensory neurons [1]. After the resolving of VZ, VZA enters the latent stage permanently within the neuronal ganglia [2]. The reactivation of VZV in singular ganglia leads to herpes zoster (HZ) which is a dermatological condition with moderate to severe pain [3,4].

Various antiviral drugs include acyclovir, valacyclovir, and famciclovir are the basic therapeutic agents for HZ treatment which lower the duration and severity of symptoms such as pain [5]. It is recommended to initiate antiviral treatment within 72h of the occurrence of symptoms and to continue for 7 days [6].

The interest in using herbs in medicine has been increased, and it has been statistically indicated to the popularity of using medical herbs by 80% of the population at global level [7].

The genus Alhagi (Camel thorn) has various medical uses [8-11]. Several studies across the literature have revealed the wide use of Alhagi plants in treating a wide spectrum of diseases including gastroenteritis, ulcers, fever, inflammations and angina pain, headache and toothache, rheumatoid arthritis, liver disorders, kidney stone and urinary tract infections, hypertension and cancer [11-21].

In this study, it is the first time to report the use of crude extract of *Alhagi graecorum* in olive oil to treat HZ (shingles).

Case Study

In this study, we reported the use of the crude extract of *Alhagi graecorum* in olive oil to treat a case of shingles. The lesion was in the abdominal area. The clinical presentation includes pain and itching. A feeling of depression for both the patient and the family was reported. Skin lesions have social dimensions, particularly among ladies. The patient visited a dermatologist who diagnosed the case as HZ and administered acyclovir treatment.

A married female patient with the age of 19 years was diagnosed to have a clinical HZV by a dermatologist. Some medicines were prescribed for her including acyclovir (viromer, (800 mg, 3 times a day for 5 days). According to the patient, no improvements were observed as she was using this medicine.

The initial treatment included the use of acyclovir (viromer, (800 mg, 3 times a day for 5 days), as described above. In our country, people have a wide range of health insurance and can access public health sectors easily. People are very sensitive to skin lesions, particularly females, as in our case. According to this context, the patient asked for other therapeutic options. She was advised to use the crude extract of *Alhagi graecorum* in olive oil after 10 days of the treatment of acyclovir had finished. The extract was topically used over 10 days.

The patient reported positive effects of its use after two days since itching became less painful and the lesion started to disappear slowly. After 10 days of using the extract of *Alhagi graecorum* in olive oil, the lesion had been disappeared.

The clinical presentation of shingles as vesicles was described to diffuse and become as one layer within the first 5 days, and this layer further completely disappeared. Finally, the patient and her husband expressed their happiness to being successfully treated and for improving their quality of life.

The patient was followed for 1 year and reported some slight itching which was disappeared after the re-application of the extract for 2 days. No more complains have been reported.

Discussion

Treating shingles purposes to reduce both severity and duration of associated pain, to shorten the episodes of shingles, and to minimize complications including postherpetic neuralgia [22]. Studies have showed the ability of antiviral drugs in lowering the severity and duration of shingles [23]. According to the study of Chen., *et al*. [24], antiviral drugs do not prevent postherpetic neuralgia. According to this context, antiviral drugs ameliorate the clinical status of shingles, but do not terminate the disease. I think that there is a need for developing new line of curative drugs. In this study, we showed the potential use of a crude extract of *Alhagi graecorum* in olive oil to successfully treat shingles. I think that better extraction techniques will improve its efficacy.

People ask for the therapeutic options of medical herbs up to 80% of total population overall the world [7]. Traditional experience of the people showed the use of medical herbs for numerous diseases as described above. No previous reports have described the use of crude extract of *Alhagi graecorum* in olive oil as a therapeutic option for HZ.

Conclusion

The crude extract of *Alhagi graecorum* exhibited anti-viral properties and successfully treated HZ.

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