

A COMPARATIVE STUDY OF REVIVIFY TO RESTORE SKIN WELL-BEING AMONG POPULATION SUFFERING FROM ACNE VULGARIS

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SCHOOL OF MEDICINE

**** Advance Pharmaceutical Inc. has patent for the REVIVIFY GEL**



BACKGROUND AND OBJECTIVE

Acne vulgaris is a common chronic inflammatory skin disease of pilosebaceous units. It affects both male and females in different times of their lives, but more commonly in adolescents. It primarily affects the face, upper part of the chest, back, arm and thigh. This happens from a complex pathogenesis of overproduction of sebum by the sebaceous gland, clogging of hair follicles leading to formation of plug, and accumulation of bacteria namely *Propionibacterium*. Thereafter, there occurs an inflammatory reaction leads to reactive species (ROS) production by the damaged follicular walls. In addition, *Propionibacterium* bacteria produces some enzymes like lipases, protease, hyaluronidases which play an important role in the inflammatory process.

Oxygen, which is an important and vital component for human, can produce reactive types like super-oxide anions, hydroxyl radicals. Super-oxide dismutase (SOD), catalase (CAT) and glucose 6 phosphate dehydrogenase are some of the antioxidant enzymes. Currently, there is a new medication, namely Revivify which is a dietary supplement based on primary antioxidant superoxide dismutase, prebiotic fiber, diverse polyphenols from various fruits juice. It stimulates the immune system by activating T-cell, and acts as an antioxidant and anti-inflammatory product. It works on the cellular level to help to repair damage cells, caused by free radicals. It also increases oxygen, reduce inflammation, and promote skin well-being by promoting healthy digestion and gut flora.

❖ *The study objective is to evaluate the effect of Revivify on Bangladeshi population to restore skin well-being suffering from acne vulgaris.*

STUDY DESIGN

❖ We conducted a case and control study in the different clinics under the Dhaka North City Corporation, Bangladesh. In total, 20 patients joined who were equally and randomly assigned in case and control groups i.e., 10 in each group.

❖ The selection criteria: male and female aged 20 years and above irrespective of marital status who were suffering from moderate to severe ranges of acne vulgaris with post inflammatory hyperpigmentation, scars and uneven skin tone.

❖ In the case group, study respondents used Revivify along with Oral Doxycycline and tropical therapy, whereas the control group used only Oral Doxycycline and tropical therapy.

ACNE VULGARIS:

Revivify Study Group;

Before Oral Doxycycline + Revivify



ACNE VULGARIS:

Revivify Study Group;

Before Oral Doxycycline + Revivify



ACNE VULGARIS:

Revivify Study Group;

After Oral Doxycycline + Revivify



ACNE VULGARIS:

Control Group (Without Revivify);

Before Oral Doxycycline Only



ACNE VULGARIS:

Control Group (Without Revivify);

After Oral Doxycycline Only

ACNE VULGARIS:

Control Group (Without Revivify);

After Oral Doxycycline Only

RESULTS

❖ During the clinical assessment, we found that the number and size of blemishes, level of inflammation and post inflammatory effect including hyperpigmentation and scars reduced substantially and their skin tone improved noticeably among the study respondents who used Revivify along with Oral Doxycycline and tropical therapy comparing to the control group.

CONCLUSIONS/PERSPECTIVES:

❖ Though, this small-scale study findings suggested that Revivify is useful to re-establish skin well-being among Bangladeshi population, yet it also highlighted the necessity of conducting a large-scale study to measure the significant impact of this medication on the Bangladeshi population having acne vulgaris with complications, so that the dermatologists can avoid over-use of antibiotics.

