

Erythema Annulare Centrifugum with 308 EXCIMER SYSTEM

Marc B. Roscher, M. D.,

Medical Director: SKIN CENTRE: Skin and Laser Surgery Centre, South Africa

Director: Dermatological Surgery, Department of Dermatology, Nelson R Mandela School of Medicine, University of KZN

President: South African Society for Dermatological Surgery

Background

It is well known and proven that UV-B narrowband light of the wavelength 308 nm is the treatment method of choice for Vitiligo and Psoriasis independent from the light source being a laser or a lamp with monochromatic narrowband light.

The wavelength of 308 nm offers the best ratio between efficacy and safety in the range of the UV-radiation. Shorter radiation is more dangerous and a longer radiation is not as effective as 308 nm. UV-B light has anti-proliferate effects and an immune modulating mechanism, which is needed for in the case of Psoriasis and Vitiligo.

We also know that the 308 EXCIMER SYSTEM can be applied for atopic dermatitis, mycosis fungoides, alopecia areata and various atopic eczema.

Recently the 308 EXCIMER SYSTEM has been used for the treatment of erythema annulare centrifugum (EAC) – red lesions in the form of a ring which spread from the center. The cause of the disease is unknown, sometimes it is linked to other diseases and conditions. Affected areas can be the thighs, legs, and sometimes upper extremities, mostly areas which are not exposed to the sunlight. Normally it disappears within months to years which makes a treatment not necessary. Appropriate sunlight can help to remove or reduce EAC quicker and lead to a faster relief.

Objective

This case study shows the effective treatment of erythema annulare centrifugum with the 308 EXCIMER SYSTEM, applying narrowband UV-B light with the wavelength of 308 nm.

Materials and Methods:

Treatment of one patient with several lesions on the backside of the thighs and on the abdomen. A histology report confirmed EAC.

The treatment was done with the 308 EXCIMER SYSTEM, Quantel Medical, using the following parameters:

Treatment Protocol

Fluence: 400 mJ/cm²

Sessions: 4 treatments, once a week

With the 308 EXCIMER SYSTEM the affected lesions can be treated targeted and healthy skin is spared. Thus the dose can be set higher which leads to better results in a shorter time and also fewer sessions. The treatment takes only a few seconds per lesion.

The endpoint of the treatment is a slight erythema, without crusting.

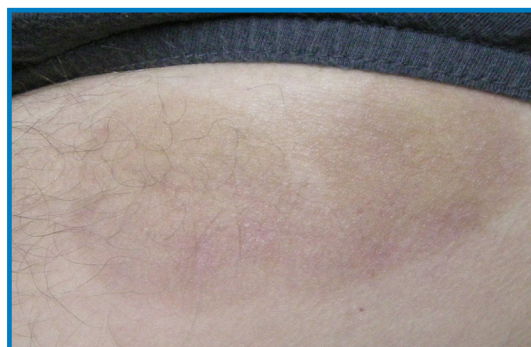
Results

The treatment is comfortable and pain free for the patient. Most lesions cleared after the treatment. Routinely a slight transient post inflammatory hyperpigmentation is seen which will fade within a few weeks.

Clinical Images



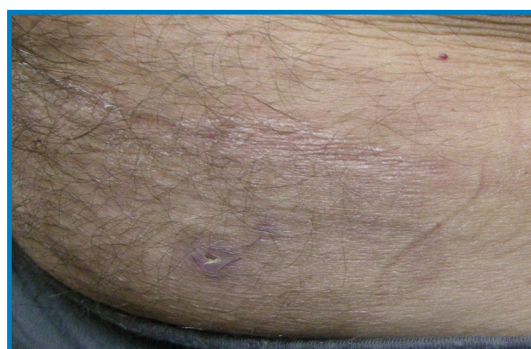
Before treatment



After 4 treatments



Before treatment



After 4 treatments

Conclusion

The narrowband UV-B light is effective for the treatment of skin conditions such as erythema annulare centrifugum. Even after one year the patient remained in remission.

Further evaluation on more patients is necessary as until now almost no data is available.