CLASSYS

REEPOT

Facial Pigmented Lesions That Can Be Treated in a Single Session



Driven by the global popularity of K-pop and K-beauty, the medical tourism market in Korea has grown substantially, with a considerable proportion of international visitors seeking aesthetic medical treatments. While botulinum toxin injections, skin boosters, and skin-tightening procedures remain among the most commonly requested treatments, demand is also increasing for the management of pigmentary concerns such as solar lentigines, seborrheic keratoses, melanocytic nevus, facial redness, and melasma. Because many international patients visit Korea for only a short period, they often prefer treatments that can deliver the greatest possible improvement in a single session. This article therefore focuses on facial pigmentary lesions for which a single treatment session may produce a marked clinical improvement.

Common Facial Pigmentary Disorders

Ephelides

The first is ephelides, one of the most common and relatively easy-to-treat pigmentary conditions. Because genetic factors play an important role, ephelides typically begin to appear at around 5 years of age. During consultation, it is therefore helpful to ask whether the patient already had freckles during elementary school. ephelides characteristically become darker in summer and lighter in winter, and they tend to recur until around the age of 50.

Treatment commonly involves Q-switched 755 nm lasers, 694 nm lasers, and IPL. Laser toning with a Q-switched 1064 nm laser tends to provide limited improvement, so shorter-wavelength lasers operating in the nanosecond pulse-duration range are generally preferred. IPL may be less effective for very faint lesions. A Q-switched 532 nm laser can also be used, although caution is required because it may occasionally induce unwanted post-inflammatory hyperpigmentation (PIH). CO_2 lasers are generally best avoided.

An important consideration during treatment is adequte cooling before the procedure. The degree of cooling should feel approximately as cool as touching a chilled beverage can. After treatment, cooling should be applied gently, just enough to relieve any sensation of heat, and continued for approximately 2–3 hours until the heat sensation has completely subsided. This can help reduce the risk of adverse effects.

When using REEPOT, a broad area is sometimes treated at less than 50% of the energy level typically used for focal lesions. In such cases, clinical outcomes are generally favorable even without application of DUODERM after the procedure.

Seborrheic Keratosis

The second condition is seborrheic keratosis (SK), the most common benign epidermal tumor and one that is reported to occur in virtually all individuals over the age of 50. Seborrheic keratoses can present in various forms, and larger lesions may need to be differentiated from solar lentigines. Very small lesions may also require differentiation from ephelides, flat warts, milia, syringomas, and melanocytic nevus.

CO_2 laser treatment is generally considered the preferred approach for seborrheic keratosis. Er:YAG lasers are also commonly used; however, they may affect a wider area than necessary and can be more difficult to control precisely, potentially resulting in longer downtime. If an Er:YAG laser is used, bleeding during treatment may indicate that the treatment has extended too deeply and should therefore be stopped. Seborrheic keratoses typically begin as small lesions and gradually enlarge or coalesce with adjacent lesions to form a larger plaque. When examined with a magnifying lens or surgical loupe, these apparently larger lesions can often be seen to consist of multiple smaller individual lesions. Treating each of these as a separate lesion and limiting ablation to the epidermis can help minimize downtime and reduce the likelihood of PIH or persistent redness. Carbonized tissue formed during the procedure is best left in place rather than removed, as this may support a more favorable healing course. Gentle cleansing can generally be resumed the following day. When differentiation from solar lentigines is difficult, a raised or bulky residual lesion observed after REEPOT treatment may be lightly treated with a CO_2 laser to achieve more complete clearance in a single session. One practical consideration is that exudate may develop after DUODERM application, so patients should be informed of this in advance.

Solar Lentigo

The third condition is solar lentigo (SL), for which REEPOT may be considered a treatment of choice. Solar lentigines are a representative example of facial pigmentary lesions that previously required 10–20 or more treatment sessions but can now, in some cases, be treated effectively in a single session. They are also particularly common among international patients. Because many physicians overseas may pay relatively little attention to pigmentary disorders, simply making an accurate diagnosis during consultation can be an important first step in building rapport with the patient.

One important consideration is the design of the REEPOT handpiece, which has a relatively broad and rigid skin-contact surface. If the handpiece is not positioned in full contact with the skin, Q-switched 532 nm energy may be delivered at high fluence without

adequate cooling and may overlap within the same area. Adequate training and familiarity with the device are therefore recommended before treatment.
When a solar lentigo overlies melasma, the melasma may worsen approximately 4 weeks after treatment even if the solar lentigo has been completely removed. Patients should be informed of this possibility in advance. In such cases, the exacerbation may persist for approximately 3-4 months, and in some cases for as long as 6-10 months, before gradually improving spontaneously.
If a solar lentigo has a brick-red appearance, underlying telangiectasia may be present. In such cases, post-treatment erythema may persist for approximately 2–3 months, but it generally fades gradually until the treated area becomes similar in color to the surrounding skin. Patients should be advised to practice particularly strict photoprotection during this period.
If dermal pigmentation is also present, it may remain visible even after complete removal of the solar lentigo and may require additional treatment. However, because the overall appearance is usually substantially improved compared with baseline, treatment of the residual dermal pigmentation can be deferred until the patient's next visit to Korea.

Facial Redness Associated with Telangiectasia

The fourth condition is facial redness caused by telangiectasia. Pulsed dye lasers and long-pulsed 532 nm lasers are commonly used for treatment. In these cases, a pulse duration of approximately 20 ms may be selected, and visible vessels that can potentially be cleared in a single session are identified using a surgical loupe or magnifying lens. Treatment can then be performed while visually confirming vessel disappearance, allowing substantial improvement to be achieved even after a single session. When vascular laser treatment is combined with skin-tightening procedures, the increased surface brightness and more even appearance of the skin may also make improvements in skin firmness appear more pronounced in before-and-after photographs. This may contribute to a complementary visual effect when the two treatments are used together.



Ephelides before and after treatment. Courtesy of Dr. Seung Choi.



Seborrheic Keratosis before and after treatment. Courtesy of Dr. Seung Choi.



Melanocytic Nevus before and after trreatment. Courtesy of Dr. Seung Choi.

Melanocytic Nevus

The final lesion that may be removed in a single session is a melanocytic nevus. Because a nevus is a hamartomatous lesion, complete removal in a single session may be preferable to repeated partial treatments. Under magnification, the boundary between the lesion and the surrounding normal skin should be carefully identified, and the lesion should be removed precisely as a discrete mass. When performed appropriately, this approach can allow complete removal while minimizing residual scarring. Depending on the size of the lesion, however, recovery may take approximately 2–3 months and, in larger lesions, as long as 6 months to 1 year. Providing patients with a clear explanation of the expected healing period in advance can help reduce unnecessary concerns or complaints during follow-up.

Moving Beyond the Fear of Adverse Effects

Among the conditions discussed above that can potentially be treated in a single session, the greatest concern is likely PIH. Fear of PIH often leads physicians either to avoid pigment treatment altogether or to take an overly conservative approach. However, most cases of laser-induced PIH gradually improve on their own over time.
With sufficient clinical experience, preventing PIH and managing it when it occurs are not particularly difficult. I hope this article encourages more physicians to take an interest in pigment treatment, which may also contribute positively to clinical practice. I would like to sincerely thank all of the physicians who have taken the time to read this article to the end, and I wish you continued success in your practice.



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