

## Wrinkles treatment

Wrinkles are one of the signs of a natural process of aging. When aging, our skin becomes thinner, drier and less elastic, less capable to protect itself from damage. As a result of this process, lines and webs. Although genetics is the most important factor in defining the skin texture, the biggest enemy of the skin is too much time spent in the sun and smoking.

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If wrinkles are bothering you, today there are a lot of ways to enable the elimination or mitigation of their appearance. Medications, fillers, removing the outer layer of the skin, chemical stimulation for collagen production or chemical peels, and surgery are efficient treatments for wrinkles.

Wrinkles are lines and defects which are formed during aging. Some wrinkles can be deep creases most often formed around the eyes, mouth and neck. Some can form diffuse webs on the face. Some leave a frowned facial expression, some leave a tired and untended expression.

## Wrinkles causes

They are caused by a combination of factors - some can be controlled and some not.

### Age

With age the skin naturally gets thinner, becomes more sensitive and less elastic. Reduced production of fatty tissue makes the skin drier and ripply, fatty tissue in the deeper layers of the face (cheekbones, bags under the eyes, areas around the ears) decreases, and the face becomes tired in appearance. There is an impression of extra skin, with creases and cracks.

## **UV radiation**

Ultraviolet radiation significantly accelerates the natural aging process and is the main cause of early aging! UV radiation tears elastic fibers and collagen which lie in the deeper layers of the skin (dermis). Without the connective tissue, which is a support for the skin, the skin loses its hardness and elasticity. As a result wrinkles appear.

## **Smoking**

Smoking can speed up the aging process by reducing the inflow of oxygen and nutrients, and by depositing toxins (tar) in the skin and mucosal.

## **Facial expressions**

Facial movements that signify our mood always lead to wrinkles which depict our character. Every time a facial muscle is used there is a movement under the skin surface. As the skin ages it loses flexibility and is no longer capable of returning to its previous position. These movements thus remain a permanent feature on our faces.

## **Saturated fats and sugar diet**

High level of blood sugar leads to the inflammation of tiny blood vessels, in skin as in other organs. Skin nutrition and oxygen inflow are reduced. Diet is very important for skin appearance. For example, a sufficient intake of blue fish can secure an adequate amount of proteins (used to build cells), and omega 3 unsaturated fats to neutralise free radicals. Antioxidants (fish, fresh fruits and vegetables) can partially neutralise the harmful influence of the Sun and smoking.

## **Rigorous diets**

They do not provide enough essential fats and proteins.

## **Lack of sleep**

It increases the level of cortisol hormone, which makes the skin thinner and lead to the enlarged capillaries. More sleep allows the production of more growth hormone responsible for a youthful appearance.

## **Treatments**

If the wrinkles bother you and make you unhappy there are a lot of ways to erase them or significantly reduce them.

### **Topical (local) retinoids**

Derivatives of vitamin A can somewhat reduce the larger wrinkles, mild pigmentations and skin roughness. They are photosensitive and if they are used without the sunscreen lotions they can cause additional redness, dryness and itchiness.

Tretinoin (Retin A) and tazarotene are examples of topical retinoids.

## Wrinkle creams

The efficiency of these creams depends on active substances and their concentration. Retinol, alpha hydroxy acids, kinetin, coenzyme Q10 and antioxidants can mildly affect the improvement of the skin texture. The results are limited and exist while the cream is applied.

## Surgical procedures and techniques

Spectrum of techniques of skin abrasion, injections, fillers and surgical procedures can partially remove the wrinkles. Every technique works on a different level and produces different results and complications.

- Dermoabrasion - The procedure consists of removing the surface layer of the skin with a special rotating brush. It removes the surface layer of the skin and a new one replaces it. Redness, scabs and swelling last for a few weeks. Sometimes it takes a few months for redness to pass and the final result become visible.
- [Microdermabrasion](#) - The procedure is similar to dermabrasion but it removes a significantly less of the skin surface. A vacuum is used on the face while aluminium oxide crystals remove the surface layer by sand blasting it. Only the fine layer of the skin is removed. A mild redness is noticeable after the treatment. A few treatments are required to acquire the desired and long lasting result.
- Lasers and radiofrequency treatments - Ablative laser evaporate the surface skin layer and heat the deeper structure which stimulates the growth of new collagen and elastine. As the skin heals, a new, more solid and smoother skin is being created. It takes a few months for it to completely heal. The development of new lasers reduces the healing period. Those are nonablative lasers, they are characterised by a reduced effect but they also preserve the surface skin layer. They heat up the deeper layers (dermis) and thus stimulate collagen and elastin. This provides for a shorter recovery time, but also asks for many more treatments which need to be repeated every year, and the result is not significantly visible.
- [Chemical peels](#) - The doctor applies the acid on to the affected areas or the whole face. With medium deep peels the whole epidermis (the surface layer) and part of the dermis are being removed. New skin takes over it's place. New skin is smoother and with less wrinkles than before. Mild redness can last for a few weeks. With surface peels it takes 5 to 6 treatments, only the surface layer of the skin is removed, and the redness passes during one week. The effect is visible after every peel, the skin is tighter, shinier, with less wrinkles and dark spots.
- [Botulinum toxin type A](#) - By injecting small doses in certain muscles the transmission of chemical signals that contract the muscles is blocked. When the muscle doesn't shir the skin it becomes tighter and less wrinkled. It has a positive effect on the forehead, the area between the eyebrows and around the eyes. The result lasts up to 6 months.
- [Fillers imply hyaluronic acid, collagen, fat](#) - They can be injected into the deep pores on the face and also the parts of the face that have lost the subcutaneous tissue. Hyaluronic acid additionally stimulates the collagen and elastin production, binds water and makes the skin significantly more fresh. Seven days after the intervention there can be a mild swelling and bruises. Treatments are repeated yearly. Durable materials (metacril and silicone) are used less and less as fillers because they cause frequent complications in the face.
- Facelift represents the removal of extra skin and fatty tissue on the lower areas of the face, and also the thinning of certain muscles. The results usually last up to 10 years. The recovery process lasts up to 6 months after the intervention.

Have in mind that results vary due to wrinkle location and their depth, and that nothing can stop the aging process, so the treatments always need to be repeated.

Every procedure can have unwanted effects and it is necessary for you to be informed by your doctor! Make sure your dermatologist or plastic surgeon is educate for the procedure he or she performs.

## Prevention

- Protect your skin from the sun, by limiting the time spent in the sun. Always use sunscreen.
- Use creams with SPF 15 at least. Also use products that block UVA and UVB rays.
- Use skin moisturizers. Dry skin leads to the shriveling of the cells, which forms fine lines very prematurely. These creams can not stop the appearance of the wrinkles but they prevent the appearance of the skin dryness typical for the elderly.
- Do not smoke. Even though you are smoking for many years you can still fix the skin tone and texture by leaving tobacco.
- Your diet should be based on fresh fruits and green vegetables, fish rich with Omega 3 acids, and six to eight glasses of liquid a day.