
Postgraduate Certificate in Cosmetic Dermatology

Injectable Fillers and Neurotoxins

Injectable fillers and neurotoxins are popular treatments in the field of cosmetic dermatology. They are used to reduce the appearance of wrinkles, fine lines, and volume loss in the face. In this explanation, we will discuss the key terms and vocabulary related to injectable fillers and neurotoxins in the context of the Postgraduate Certificate in Cosmetic Dermatology.

Injectable Fillers:

Injectable fillers, also known as dermal fillers, are substances that are injected into the skin to add volume, smooth out wrinkles and fine lines, and contour the face. They are composed of various materials, including hyaluronic acid, calcium hydroxylapatite, poly-L-lactic acid, and polymethylmethacrylate.

Hyaluronic Acid (HA):

Hyaluronic acid is a naturally occurring substance in the body that is responsible for maintaining skin hydration and elasticity. It is a popular ingredient in injectable fillers due to its ability to attract and retain moisture, leading to plumper and smoother skin. Examples of HA fillers include Restylane, Juvederm, and Belotero.

Calcium Hydroxylapatite (CaHA):

Calcium hydroxylapatite is a biocompatible substance that is found in bones and teeth. It is used in injectable fillers to stimulate collagen production, leading to longer-lasting results. An example of a CaHA filler is Radiesse.

Poly-L-lactic Acid (PLLA):

Poly-L-lactic acid is a synthetic biodegradable polymer that is used in injectable fillers to stimulate collagen production. It is a longer-lasting filler than HA and CaHA and is used to treat deeper wrinkles and volume loss. An example of a PLLA filler is Sculptra.

Polymethylmethacrylate (PMMA):

Polymethylmethacrylate is a synthetic, non-biodegradable material that is used in injectable fillers to provide permanent volume and lift. It is used to treat severe volume loss in the face and is not as commonly used as HA, CaHA, or PLLA fillers. An example of a PMMA filler is Bellafill.

Cross-linking:

Cross-linking is a process that is used in injectable fillers to increase their durability and longevity. It involves chemically bonding individual molecules of the filler material together, creating a network of molecules that is more resistant to degradation.

Neurotoxins:

Neurotoxins are substances that are used to temporarily paralyze muscles, reducing the appearance of wrinkles and fine lines. They work by blocking the transmission of nerve impulses to muscles, preventing them from contracting and forming wrinkles.

Botulinum Toxin:

Botulinum toxin is a neurotoxin that is derived from the bacterium *Clostridium botulinum*. It is the most commonly used neurotoxin in cosmetic dermatology and is marketed under the brand names Botox, Dysport, and Xeomin.

OnabotulinumtoxinA (Botox):

OnabotulinumtoxinA is the active ingredient in Botox, a popular neurotoxin used to treat wrinkles and fine lines. It is a highly purified form of botulinum toxin that is administered in small doses to specific muscles in the face.

Dysport:

Dysport is a neurotoxin that is similar to Botox but has a slightly different formulation. It is used to treat wrinkles and fine lines in the same way as Botox but may have a slightly faster onset of action.

Xeomin:

Xeomin is a neurotoxin that is similar to Botox and Dysport but is free from accessory proteins. This makes it less likely to cause an immune response, which can lead to reduced effectiveness over time.

Dilution:

Dilution is the process of mixing a neurotoxin with a saline solution to achieve the desired concentration. The concentration of the neurotoxin is important for achieving optimal results and minimizing the risk of side effects.

Brow Lift:

A brow lift is a cosmetic procedure that is performed using neurotoxins to lift the eyebrows and reduce the appearance of wrinkles and fine lines in the forehead. It is achieved by injecting the neurotoxin into specific muscles that are responsible for pulling the eyebrows down.

Crow's Feet:

Crow's feet are wrinkles and fine lines that appear around the eyes, often caused by smiling or squinting. They can be treated using neurotoxins to relax the muscles around the eyes and smooth out the skin.

Glabellar Lines:

Glabellar lines are wrinkles and fine lines that appear between the eyebrows, often