

Collagen

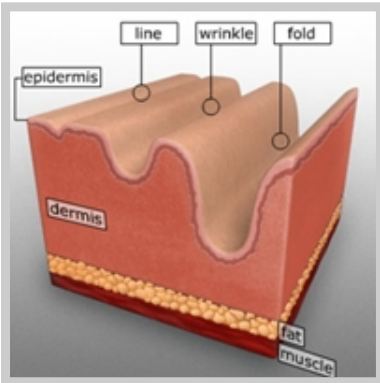
Injectable fillers are one of the most popular facial rejuvenation techniques. As we age, the underlying tissues that keep our skin looking youthful and firm begin to break down due to the effects of gravity, sun exposure, diet, genetic factors, and years of facial muscle movement. Over time these factors contribute to the development of lines, wrinkles, and folds in the face.





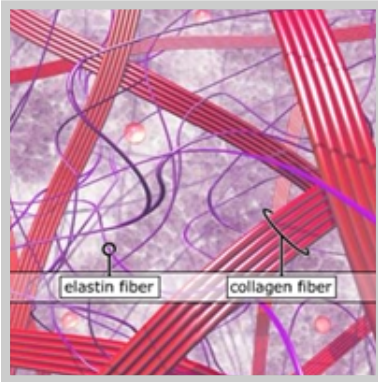
Collagen Injection Introduction

Injectable fillers are one of the most popular facial rejuvenation techniques. As we age, the underlying tissues that keep our skin looking youthful and firm begin to break down due to the effects of gravity, sun exposure, diet, genetic factors, and years of facial muscle movement. Over time these factors contribute to the development of lines, wrinkles, and folds in the face.



Where Do Wrinkles Form?

Your skin consists of two layers known as the epidermis and the dermis. The epidermis, or outer layer of the skin, acts as the skin's primary defense against the environment. The dermis, or innermost layer of the skin, is composed primarily of connective tissue and provides the skin with a support network. Most facial wrinkles and deeper folds occur within the dermal layer of the skin.



What Causes Wrinkles?

Within the connective tissue of the dermis, collagen and elastin fibers form a network that provides the skin with structure, support, and elasticity. Furthermore, fat cells and other molecules, such as hyaluronic acid, help to create volume beneath facial skin. With time, this network of collagen and elastin fibers breaks down, and hyaluronic acid molecules and fat cells that create volume are depleted. Together, breakdown and depletion of these molecules result in wrinkles and other changes to facial skin.

When used as standalone treatments or with other procedures, injectable fillers can reduce or eliminate wrinkles and scars, create fuller lips, and treat lipoatrophy, or fat loss beneath the skin. With little downtime and almost immediate results, injectable fillers offer a safe, effective method of restoring a smoother, more youthful appearance.



The Basics of Collagen Fillers

Collagen makes up the majority of the dermis. Much like the framework of a house, its primary function is to provide structure and support to the skin. First employed over twenty years ago, collagen injections are generally used to treat facial lines, wrinkles, and scars, and to enhance the appearance of the lips. Collagen fillers replace the collagen that has depleted over time, restoring the structure beneath the skin's surface.

Types of Collagen Fillers			
Type	Description	Treatment Area	Results
Zyderm/ Zyplast	purified from bovine skin	various facial lines, wrinkles, and scars; lips	lasts up to 6 months
Cosmoderm/ Cosmoplast	human collagen purified in a laboratory	various facial lines, wrinkles, and scars; lips	lasts up to 6 months
Cymetra	purified from human cadaver tissue	various facial lines, wrinkles, and scars; lips	lasts up to 6 months
Fascian	purified from human cadaver fascia	various facial lines, wrinkles, and scars; lips	lasts 3 to 6 months
Autologen	derived from patient's skin	various facial lines, wrinkles, and scars; lips	lasts up to 6 months

Types of Collagen Fillers

There are two general types of collagen-based injectable fillers, known as bovine-derived and human-derived collagen. Zyderm® and Zyplast®, marketed by INAMED Aesthetics, are derived from purified bovine (cow) collagen. There is a slight risk of allergic reaction associated with bovine-derived collagen. Therefore, an allergy skin test will be performed approximately one month before the procedure. Two of the most common human-derived collagen fillers are CosmoDerm® and CosmoPlast®, marketed by INAMED Aesthetics. Unlike bovine-derived collagen, allergy skin tests are not required prior to an injection procedure.



Procedure Preparation

Depending on the extent of treatment, collagen injection procedures typically last between fifteen and sixty minutes. Prior to the start of your procedure, the treatment areas will be cleansed. Collagen injections contain lidocaine, which is an anesthetic agent. Therefore, a separate anesthetic is usually not administered. However, if you are especially sensitive to pain, a topical cream anesthetic or a freon spray may be used to numb the treatment area during the procedure.



Collagen Injection Procedure

Using an ultra fine needle, collagen is injected into the dermis at several points along the edge of the treatment area. After approximately three to five injections, the physician will massage the treatment area. The physician will continue injecting the filler along the length of the wrinkle or fold until maximum correction has been achieved. If a local anesthesia has not been used, you may feel some minor stinging from the injections. The injected collagen replaces the body's collagen that has been depleted over time, improving the skin's underlying structure, and restoring a more youthful appearance.



Collagen Injection Recovery

Immediately following the injections, you may experience some redness, slight stinging, minor swelling, or bruising in the treatment area. Tiny scabs may also form at the injection sites. These symptoms typically disappear within two to three days. Bandaging is not necessary and most patients are able to resume normal activities immediately following treatment.



Collagen Injection Results

The body will eventually metabolize and absorb the injected collagen over time. Therefore, while the effects are immediate, collagen injections do not provide the same long-lasting results that may be gained from cosmetic surgery. Although the longevity of results varies by patient, results from collagen injections are typically maintained for three to six months.