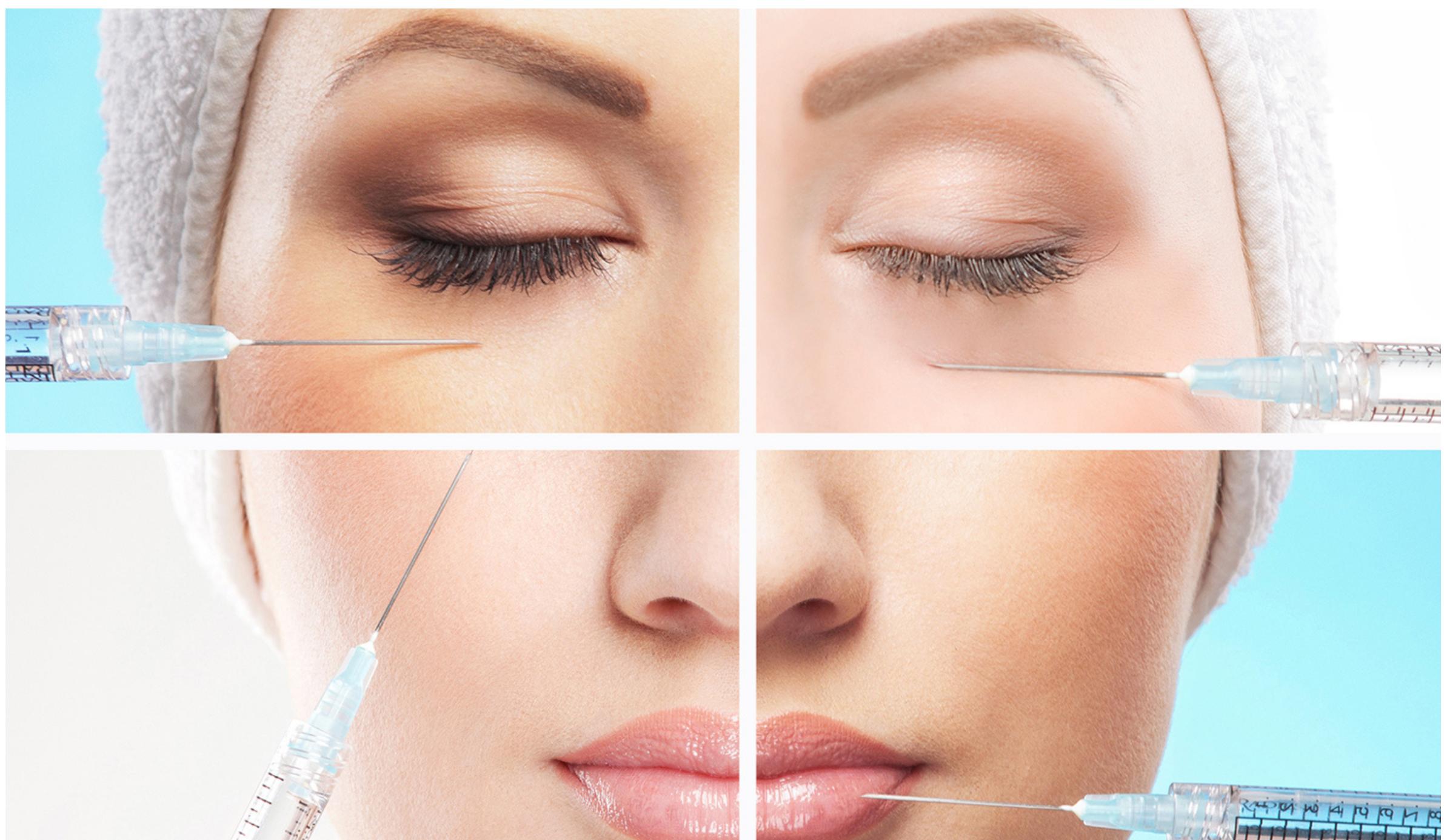


# THE ULTIMATE GUIDE TO **DERMAL FILLERS**



**FREYJA**  
**MEDICAL**

Everything you need to know to get great  
results and stay safe.

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## **Introduction**

Over ten years ago, I tentatively entered the field of aesthetics. Back then there wasn't a lot of information about the different treatments available and how they should be done - it all seemed like a bit of a wild frontier!

Thankfully, over time things have changed. The field of aesthetic medicine has become recognised as a speciality in its own right. More and more research is being done into various cosmetic treatments and advancements and it seems there is something new coming out every week.

Dermal fillers are at the top of the list, along with Botox, when it comes to popularity for aesthetic procedures. This isn't unexpected as they can give amazing results when they are used properly. A word of warning first though - unlike Botox, dermal fillers are not 'prescription only' in the UK. This means that pretty much anyone can pick up a syringe of filler and inject it into your skin without any checks on their level of training or expertise.

The fillers themselves are classed as 'medical devices' rather than prescription drugs and therefore do not go through the same rigorous testing that is necessary for prescription medications.

For these reasons alone, it is vital that you see a medically qualified practitioner that uses established, safe products - preferably ones that have been cleared by the American FDA (Food and Drug Administration) for cosmetic use. We have to look to America for guidance on this as sadly, there is no meaningful degree of regulation in the UK.

So, after that, let's get back to the basics of what fillers are and why we use them.

In order to understand why we need dermal fillers, we need to understand a bit about how the face changes over time.



## **Face Changes Over Time**

We all know the face changes with age. A youthful female face is often described as 'heart-shaped' or an inverted triangle - i.e. more volume on the midface over the cheekbones and tapering down nicely to the chin.

Over time, this shape flips as the facial fat is redistributed to the lower face and there are changes to the bone structure and collagen in the skin. This causes an overall sagging effect giving a heaviness to the lower face and jowl areas.

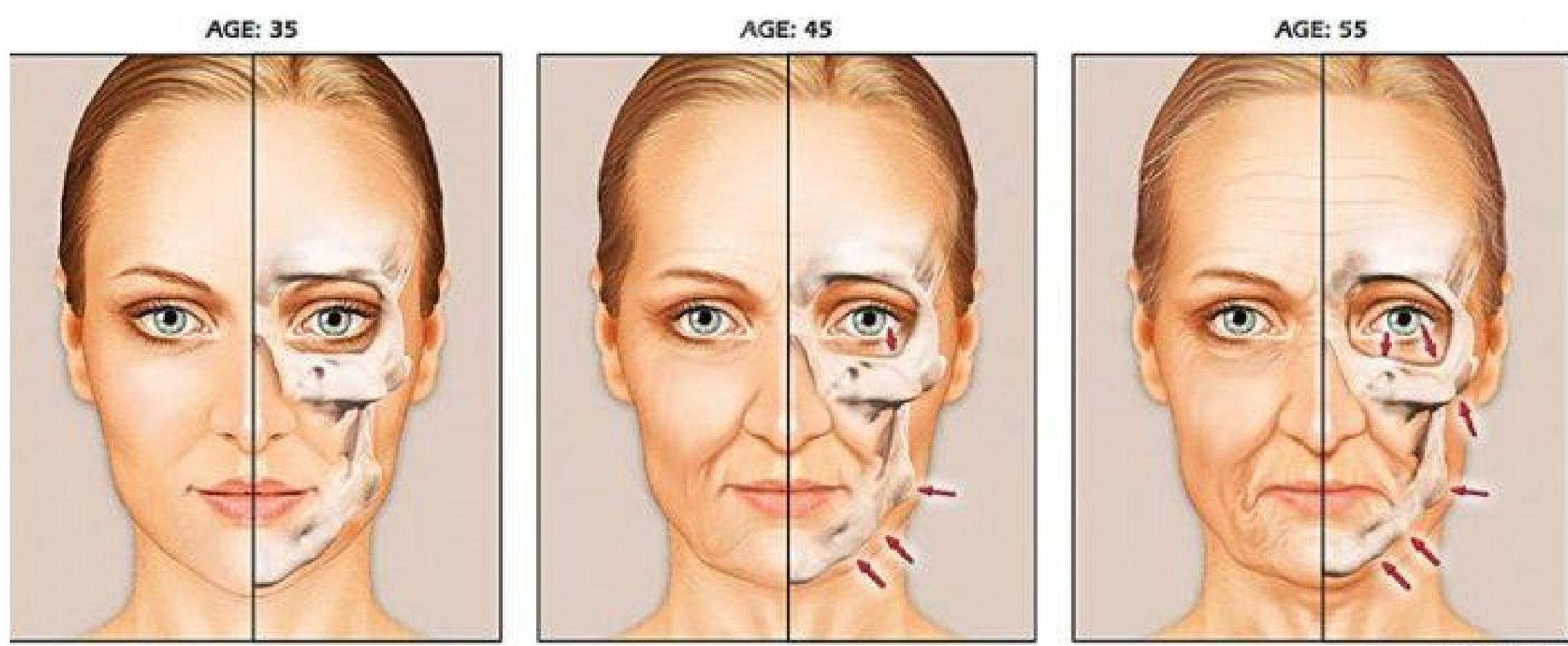


Other areas particularly affected by fat loss are the cheeks just under the eyes. This often causes a sunken, tired look and as the cheek fat pad goes south, it creates folds from the nose to the mouth corners.

There are a large number of these fat pads over the face which all cause a lifting and plumping action in our youth but, as they diminish, the skin tends to sag and create folds.

To add insult to injury, as well as the fat pad changes, we also have bone reabsorption. Over time, women lose bone mass at a rate of about 1% per year after the age of 35 years. This can be slowed down a bit during menopause with the use of HRT (hormone replacement therapy) but men tend to avoid this particular annoyance until much later in life.

The results of this reduction in bone mass lead to the eye sockets changing shape, the hollows on the temples becoming more pronounced and a more obvious brow ridge. The jaw doesn't miss out either with an overall loss of density and a change in shape - losing the sharp definition of youth. It almost appears that everything is trying to collapse inwards!



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Taking all of this into account, the short answer as to why we use dermal fillers, is to replace lost volume (mostly!). They really are great at doing this - if they are used correctly.

I say 'if they are used correctly' because we have all seen examples of fillers used badly. This is what puts a lot of people off from ever even considering them to treat their facial concerns.

## **What are Dermal Fillers?**

Dermal fillers are small injections of a gel, typically made up of hyaluronic acid (but more about this later), that fill wrinkles and add volume to soft tissue. They provide structure, volume and lift.

The fillers themselves come in various different consistencies, from a firm and dense gel to add lift and contour; to a thinner, softer consistency to boost volume alone. The different filler consistencies have various uses - from the firm lift that might be needed for deep cheek hollows, or the soft volumising of the lips. They get to where they need to be placed by either a small needle or a cannula (like a long blunt needle), depending on the practitioners' preference and the areas being treated.

# The Different Types of Dermal Filler

When it comes to dermal fillers, there are many brands to choose from but there are only 4 main types:

- 1: The most common type are fillers made from hyaluronic acid (HA)
- 2: There are collagen-stimulating fillers that are also widely used
- 3: Then there are the permanent fillers - just never, ever touch these!
- 4: Skinboosters - the new kid on the block

**1: Hyaluronic acid (HA) fillers** are temporary ones and are the best known and most widely used type of filler in the UK. Interestingly, HA is a naturally occurring substance that is found in our skin quite abundantly - it may sound artificial, but we are born with it! This type of filler has the longest track record and the most safety data for long term use. Big well-known brands for this type include my personal favourites, Restylane and Juvederm. These HA gels provide a wide range of applications for facial rejuvenation and, when injected, pulls moisture into itself giving a plumping and lifting effect.

There is an added bonus in that the filler itself also seems to have a stimulating effect on the skin where it is injected, causing new collagen formation. The HA that is injected is slowly broken down over time by naturally occurring enzymes in the skin called hyaluronidase.

This type of filler is designed for the specific purpose of replacing lost volume or enhancing the structure of the face. The majority of the ones currently on the market contain a bit of local anaesthetic so that the procedure is more comfortable when they are injected. One of the main advantages of this type of filler is that if required, it can be reversed by injecting a concentrated hyaluronidase into the area treated.



**2: Collage-stimulating fillers** are also a temporary type of filler, but differ from HA fillers as they also have an extra skin stimulating effect.

They still act to add volume or support where they are injected, but have the added bonus of containing extra ingredients that cause the skin to create more collagen. This means that the effects of these types of filler can last much longer. Well-known brands of this type of filler include Sculptra and Radiesse.

While the longer lasting effects of these are beneficial, they are more expensive than normal fillers. There is also an increased risk of nodules being formed in the skin due to their skin stimulating effects. Additionally, if you are not so keen on the end results of the treatment, it will take a lot longer to disperse than the HA type of filler and they cannot be reversed with hyaluronidase injections.

**3: Permanent fillers** - just don't. These have, thankfully, almost disappeared from use today in modern aesthetic practice. Often made from substances like liquid silicone, they have a much greater risk of complications and side effects. They also have no way of being reversed and don't disperse on their own over time.

Even if you do get a good result initially with this type of filler, your face will change over time but the position of the filler won't - which can lead to a very odd appearance!

**4: Skinboosters** are a type of HA filler but are different from the ones used for lines, contouring and volumising. These fillers are designed to be very soft and placed nearer to the surface of the skin over wider areas. The aim is to use them to improve skin texture and plumpness. They are often described as 'moisturising the skin from the inside'.

This type of filler is often used for finer lines and crepe-like skin on the face but is also an excellent option for the backs of the hands which can often be neglected.

Skinboosters Before & After



## **How fillers are used**

In the past, dermal fillers were used in quite a basic way. If there was a line or wrinkle, the filler was injected in below it. Nowadays, a good practitioner will have a more progressive and modern way of using these treatments. We have moved away from filling every line and instead, we are using our understanding of the way the face ages over time to address the changes in structure and volume. Having an overall more holistic look at the needs of the face gives a much more natural and subtle effect.

We can use the more firm type of filler to provide lift and support where it is needed, restoring a more youthful look when the volume is added back. Redefining contours of the cheeks and jaw can be very flattering as well as replacing the volume from areas such as tear troughs and temple hollows. It is important that this structure is replaced before attempting to smooth out the fine lines and wrinkles.

Think of it this way, you wouldn't paint a wall if you hadn't sorted out the brickwork first, would you?! Sort the underlying structure out first before moving onto the finishing touches.

## **How the use of fillers has developed over time**

In the early days of aesthetic medicine, practitioners were focussed more on filling lines and using as little filler product as possible to do so. This kind of makes sense, as not everybody is burdened with excess money to splash out on treatments!

However, as we understand more about the underlying anatomical changes and wish to produce natural results, we have moved towards using *more* product placed in very specific areas to achieve the best results – without making people look like an overstuffed pillow! These are the types of results that you see in the ‘before and after’ shots of amazing filler results. These models have often had upwards of 10ml of filler placed over a course of time to achieve the results you see in their promotional material.

Whilst this may be outside of the budget of most of us, we can have it in the back of our mind when we are agreeing on a treatment plan over time that can develop and build on subsequent treatment sessions.

## What 'Bad' Filler Looks Like

You only need to turn on the TV and tune into a reality show to see 'bad' dermal fillers. That 'puffy hamster cheek' look or the lips that appear to be two over-inflated sausages sticking out in front in an exaggerated pout. It looks awful. These over-filled and fake faces seem to be everywhere now. It's no wonder that many people are wary of fillers.



In the right hands, dermal fillers can give a beautifully natural and subtle look. By using them to provide lift and support where we have lost it, we can achieve fabulous results. I don't know who is responsible for injecting these TV celebrities - but they should offer a refund!

# **What to expect during a filler treatment**

If you have never had fillers before it can seem like a big step. Fortunately, in experienced hands, the procedure isn't anything to be afraid of and has very little discomfort.

It's important that you have had a full consultation prior to undergoing filler treatments covering not only what you want to achieve, but also your medical history and determine if there are any reasons that fillers are not a good option for you. When it comes to the procedure itself, this definitely should be in a clinic setting. It boggles the mind that anybody would risk getting these done anywhere that wasn't specifically set up to perform safe cosmetic treatments and have the proper resources and equipment to deal with any eventuality.

The skin will need to be properly prepared, which means removing make-up in the areas and giving it a good clean. My personal practice is to use an antiseptic solution on the skin that we usually use during skin surgery, as this minimises the risk of infection. Often a 'numbing' anaesthetic cream is applied to the skin and left on for 20 minutes or so.

This isn't always needed as some areas are less sensitive than others. On occasion, I have been known to use special anaesthetic 'block' injections for areas that are particularly sensitive, or for people who really don't want to feel anything. This should only ever be carried out by a doctor or nurse with specific training.

Once the numbing has had time to take effect, it is time to actually do the filler treatment. This can be delivered via a needle or a cannula. The cannula is like a long blunt needle which can be used to slide between the skin layers and theoretically has less risk of damaging structures like blood vessels. In practice, both of these techniques have their advantages and disadvantages. I like to use a mixture of both techniques depending on where I am placing the filler. Some areas require more pin-point precision, so a needle is better. Others benefit from the gentle glide of the cannula. It often depends on the skills and preference of the practitioner as to the technique used.

After the filler has been placed it is not unusual to need to gently massage or mould it to the desired shape and placement. The skin is then cleaned again and sometimes a little ice pack can be applied if needed. It is really important that your practitioner takes you through the aftercare advice and, preferably, provides you with a written advice and information sheet.

## Dermal Fillers - Why the worry?

Dermal fillers tend to be the number one thing nowadays that people get worried about and scared to try. It's not surprising really with the ever-present images we see of overfilled lips and pillow-like cheeks from overzealous treatments. We are bombarded by a 'reality' celebrity culture where everyone looks the same with flawless, yet slightly plastic facial appearances. It is little wonder that people are wary of these procedures when this is all you see.



What is often not understood, is that there are huge numbers of people out there who have had fillers done properly with strategic placement of the product to provide natural lift or volume, contouring a line or providing shape. These people don't look 'done' and so we are unaware of what a great treatment they have had.

Despite all of this worry about fillers looking unnatural, the real concern with them is that they can cause significant problems if used in the wrong way. In the UK we have a ridiculously poor level of regulation on dermal fillers. Literally anybody can legally pick up a syringe of filler and inject it into another person's face. There are no training standards and the fillers themselves are not legally obliged to be put through the rigorous testing you would expect of a substance that is being injected into your body. Why is this? Well in the UK, these products are not prescription medications (unlike Botox) but classed as 'devices' and subject to much less scrutiny.

So how do we know which fillers are safe? For this, we have to look to our American friends. Over in the USA, there is very strict regulation and safety testing of all of these products by the FDA (Food and Drug Administration) which is seen as a worldwide gold standard for safety. The two major brands that have the longest safety data are the Restylane and Juvederm ranges of fillers. Teoxane and Belotero are other brands that have been around for a while and also have good data.

# Dermal Fillers – What can go wrong

In experienced and trained hands, FDA approved dermal fillers are very safe to use and have as a rejuvenation treatment. However, nothing is risk-free and there are things you need to be aware of before embarking on treatments.

**Bruising** – Minimal bruising is possible with any injection, occasionally this can be a bit more extensive – especially if you take blood-thinning medications or have treatment to an area that has a greater blood supply, such as around the eyes. Bruising usually settles down within a few days but occasionally can persist for up to a couple of weeks but it can be covered with a bit of concealer.

**Swelling** – Different injection sites react in different ways to being treated. It's very common to get some swelling when you are injected in the lips or tear troughs but less common in the cheeks or around the jawline. This usually settles within a few hours but can persist for up to a few days. Using an ice pack can help with this if it occurs – holding it onto the area gently for no more than 15 minutes per hour. Be sure not to press too hard as you might displace the filler from where it was intended to be!

**Infection** - any time the skin is pierced there is a small chance of infection. Ideally, you will be seeing a medical professional who knows how to prepare the skin properly prior to treatment. Despite this, there is still a small risk of bacteria getting into the injection site causing an infection. If the area is getting red, hot, swollen or painful you need to contact your practitioner as soon as possible as you may need antibiotics.



**Reactivation of herpes/cold sores** - this can be a risk when treating around the lips and mouth area. If you have a history of cold sores then it is important to let your practitioner know. The cold sore virus (herpes virus) can be reactivated by the trauma of having fillers injected. If this happens then there can be a very significant breakout which can be painful and unsightly. Ideally, your practitioner will be able to prescribe an anti-viral medication to take, starting a couple of days before treatment and continuing for a couple of days after, to reduce the risks.

**Visible lumps under the skin** - when fillers are used to provide a lot of structure or lift, you can often feel lumps under the skin but they are not visible - this is normal. It becomes a problem when lumps are visible. If it is a case of misplaced filler or filler that has moved away from the intended area, then often this can be massaged away. See your practitioner for this.

Occasionally, however, the body can react to the filler and form a granuloma. These are more of an issue as they are harder to deal with. They form when the body has an inflammatory reaction to the filler. This can happen even if you have had fillers with no issues in the past. If a granuloma forms you need the assistance of a practitioner who is expert in treating this type of complication.

**Filler injected into blood vessels** - this is the most significant risk with fillers, but thankfully, the least likely. This is the major reason you need to see a practitioner who is fully trained and knows their anatomy. If the filler is injected into a blood vessel, it can block it. This starves the tissues of the vital blood supply that keeps the cells healthy and alive. If the filler is injected into one of the vessels that leads to the eye, it can result in blindness in one eye!

The rare complication of blood vessel occlusion should be quite obvious if it is occurring, as there is usually pain, discolouration and skin blanching (going white) around the injection site. This is an emergency that your practitioner needs to be able to spot and treat **immediately**.



Reading the list of potential problems is probably enough to put you off filler treatments forever! However, these treatments really are both safe and effective when used in properly trained hands. Before you undertake any filler treatments, it is worth just asking the question if your practitioner is medically trained and has access to (and the skills to use) emergency treatments.

# **Commonly asked questions about fillers**

We've talked about lots of the things that people think about when considering dermal fillers, but there are some frequently asked questions that crop up time and again that we will cover in this section.

## **Which areas can be treated?**

The most common areas treated are:

- Nasolabial folds (lines between the nose and corner of the mouth)
- Marionette lines (from the corner of the mouth downwards)
- Lips (Enhance the shape, definition and volume of lips)
- Cheeks (Replace lost volume and structure)

However, fillers can be used in a huge number of ways nowadays. They aren't even confined to the face!

## **How long do they last?**

The duration depends on many factors, such as the area treated, the individual's skin type, skin condition, lifestyle and age.

On average, a standard cheek filler treatment will last over 12 months or more, whereas lip fillers may only last for 6 months before a repeat treatment is required.

## **Does it hurt?**

It may be hard to believe, but filler treatments (even lip fillers!) can be done in a comfortable way. A lot of the products have a local anaesthetic in them and, if the skin is prepared with numbing creams or injections beforehand, the procedure can be near to painless.

## **Can dermal fillers be removed?**

The short answer is, yes! HA fillers can be quickly dissolved using an enzyme known as hyaluronidase (Hyalase). This acts to disperse hyaluronic acid, speeding up the natural breakdown of the dermal filler.

## **How soon will I see the results?**

The great thing about fillers is that results are immediate. There may be some further improvement over the following few days as moisture is absorbed into the filler to give even more lift and plumping.

## **Will I look natural?**

When dermal fillers are used in the appropriate amount and placed in the right location, the result can be a beautiful, natural effect. Fillers are not meant to create totally different features. In the hands of an experienced provider that has extensive knowledge of facial anatomy, the outcome simply enhances your own facial features.

## **Conclusion**

This guide is meant to provide you with the basics on what to look out for and consider when you think about dermal fillers.

These treatments have truly revolutionised dermatology and medical aesthetics. A single treatment can give instant results and be a long-lasting addition to the overall rejuvenation effect we are looking for. It is important to remember though, the results we want with this are entirely dependent on the experience and skills of the injector. Do your research and only choose a safe and reputable medical professional.

If this eBook has inspired you to look further into aesthetic treatments you can find lots more information on our [clinic website](#).

Alternatively, it would be lovely to meet you in person at our clinic in Wrexham, North Wales.





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