

## Vascular Occlusion Patient Guide

**Please read fully & carefully you should be fully aware of the symptoms and report these immediately to your Practitioner, timely reporting and intervention treatment will significantly reduce further complications & improve the outcome.**

### What is a Vascular Occlusion ?

A vascular occlusion is a very rare occurrence when the dermal filler is injected into the blood vessel (artery or vein) or vascular compromise when the filler causes compression either from swelling or expansion, Hyaluronic Acid absorbs water like a sponge. Essentially once the vessel is compromised or blocked it cannot supply blood to the surrounding tissue.

The vascular system is complex, vessels are connected so a vascular occlusion can lead to severe secondary complications which can include tissue death (necrosis) scarring and deformity of the features, blindness, stroke & death. This document is not designed to scare you its sole purpose is to alert you to these risks, by recognising the symptoms early so that you can alert your Practitioner, they would rather be contacted even if you aren't certain there is a problem.

Your feedback is essential, they will not be offended or feel that you are wasting their time, they rely on you to report side effects, you are provided with two contact numbers and are able to reach them 24 hours a day.

### Will this happen to me ?

All procedures come with a degree of risk, your Practitioner will discuss your treatment in full and explain the risks. You should ask questions, take time to understand the treatment and don't allow yourself to feel pressured into treatment. During the procedure your Practitioner will take certain steps to minimise the risks, such as aspiration of the syringe before injecting, wherever possible using a blunt tipped cannula rather than a needle. Using the correct type of filler for the area is also important and again this reduces the risk. No procedure can be risk free, using a competent Medical Practitioner will ensure that they practice safely, will have the knowledge and skills to perform emergency treatment and will have access to other Medical Experts which can be critical in getting you the intervention to prevent permanent damage.

### Vascular Compromise Recognising the Symptoms. How will I know if I have a Vascular Occlusion ?

If the filler is injected directly into the blood vessel your Practitioner will observe blanching either at the site of injection or in the area adjacent to the injection site, they may massage this and then perform a capillary refill test if it is not an obvious occlusion, the local anaesthetic contained in the dermal filler can sometimes cause a blanching effect on the skin.

If the Practitioner is satisfied that the capillary refill test is normal, you may be asked to monitor and perform a capillary refill test at regular intervals and report back to them, you will be advised what to do by the Practitioner, this document will also provide a comprehensive guide.

The Practitioner may not have any concerns at the time of treatment, it is therefore important that you monitor closely the treatment area do not try to convince yourself that everything is ok or discuss concerns with friends or relatives,

Speak to your Practitioner, they will advise you, guide you and reassure you. Once you have left the clinic, we rely on you to report anything unusual, time is of the essence, the faster you receive treatment in the event of a complication the less risk there is of more serious problems associated.

### You may experience some or all of the symptoms;

- **Pain**, you may not experience this immediately as the filler may contain local anaesthetic, the sensation after filler is usually a tight feeling, slightly tender and stiffness, if you are experiencing a pulsating sensation or throbbing pain, sometimes extreme pain may be experienced this is not normal and should be reported immediately.
- **The skin appearance**, initially redness, the skin may look dusky, a bluish tint with a fine lace like pattern, if this is not treated promptly the skin will begin to break down due to the lack of blood supply, you will observe pustules the most superficial layers of the skin will slough off (peel away), you may also experience the skin breaking down from inside the mouth, ulcer like lesions (in the case of fillers close to her mouth or lip area), left untreated the skin will become necrotic (turn black and die). Once the skin has become necrotic the damage is irreversible and tissue may need to be removed surgically resulting in scarring and/or loss of tissue permanently altering your appearance.

A vascular occlusion may not be immediately evident, filler can migrate and swell as Hyaluronic Acid absorbs & retains water increasing the volume, this along with natural swelling following treatment could create pressure around the filler site and compromise the blood flow within it, although this is not proven.

### Images Vascular Occlusion



***An obvious Vascular Occlusion like this one here will be immediately recognised and treated in clinic, the blanching (white area) is extensive, and you can see just how much of the face is affected by the occlusion.***

***If this occurs during your treatment, the Practitioner will inform this is always an emergency and you would not undergo treatment without consent to emergency interventions.***

***Hyaluronidase will be injected around the site of the VO, this will dissolve the filler quickly, but depending upon the area and the filler you may require more than one treatment to resolve the problem, other treatments will be administered which will be discussed later.***

***Below you can find out more regarding the emergency treatment and a comprehensive guide to follow.***

The following images are examples of the skin when affected by a Vascular Occlusion and clearly demonstrate the deterioration of the tissue, if in doubt report it to your Practitioner early intervention means that there is less damage and complete recovery is possible. The progression of tissue damage following a vascular occlusion can be swift and early intervention is essential, **it is always considered as an emergency.**

Initially after treatment, the area may look like a bruise & can easily be mistaken. The Livedo (lace-like patterning) may be observed & the rash will track away from the treatment area. This type of pattern may be seen immediately or hours after treatment is completed.



This clearly demonstrates the progression of the rash, ischemia (restriction of blood supply to tissue) can be observed, without prompt treatment the skin will begin to break down. The blue tinge becomes more obvious, this can be affected by the temperature & poor circulation.

The skin begins to break down and is becoming infected due to the lack of oxygen. The skin is at risk from bacterial &/or Viral infections. Once the skin has reached this stage the possibility of irreversible damage is likely from scarring.



Once the skin has reached the stage of necrosis, it is irreversible careful wound management can minimise the loss of tissue & prevent further scarring. This is preventable with early intervention from your practitioner this is why its so important to report early.



**Please remember your Practitioner would rather be contacted if you have any concerns, it is always better to be cautious.**

**If you do contact your Practitioner, please describe your symptoms clearly**

- Pain Severity Scale 1-10, 1 being mild pain & 10 being severe pain.
- Skin, describe how the skin looks, is there any discolouration ?
- Loss of circulation, does the skin feel cold to touch ?
- Do you feel unwell ?
- Do you have redness, & heat at the site of injection ?
- Any other concerns ?

**Are there any side-effects from Hyaluronidase ?**

Yes as with all medicines there are risks & complications, general risks associated with Hyaluronidase can be a reduction in natural Hyaluronic acid leading to uneven appearance.

The injection can be painful, swelling, redness, rash and bruising.

In rare circumstances you may be allergic to this medicine leading to a rare complication called anaphylaxis, which can be life threatening. Your Practitioner is trained in emergency life support and carries emergency medicines, your safety is always our priority.

**If a vascular occlusion occurs what is expected of me ?**

1. Prior to treatment you have already consented to emergency intervention, there is no compromise here.
2. You will remain in clinic until the Practitioner has agreed that it is safe to leave.
3. You agree to engage with the Practitioner answering calls &/or texts promptly.
4. You will send photographs of the treatment area when requested.
5. You will attend follow-up appointments as requested, please note this may not be at your local clinic.
6. Aspirin will be administered orally, and you may be requested to take this for a couple of days.
7. Heat pad & topical medicine to dilate the blood vessels will also be applied.
8. Dermal Filler following emergency treatment with Hylase is not indicated for up to three months.
9. Photographs should be taken with and without flash and should be clear, blurred photographs are of no use.
10. A video review may be required to assess the capillary refill which should be under 3 seconds, to undertake a capillary refill test you should stand in front of a mirror, in good light press firmly over the area for around 5 seconds when you release the pressure count the number of seconds before the colour is returned to the area. Your Practitioner will instruct you to correctly to perform a capillary refill before you leave the clinic.



## Clinic Terms of Business

I understand that though complications are uncommon, they do sometimes occur. It is possible that side effects not described may occur and indeed that a complication not previously reported may occur for the first time. I understand if I suffer any adverse reactions that are not expected, or concern me, I must contact my practitioner, and book a review appointment. MD Medical Aesthetics Ltd cannot take responsibility for complications or results that have not been reported, assessed, documented and managed in a timely manner. Whilst I have been advised of the probable result, this cannot be interpreted as a guarantee. Results vary from one individual to another.

I confirm that the medical health history form has been completed truthfully and I am fully aware that withholding medical information, including history of previous treatment, may be detrimental to the safe and optimal outcome of any treatment administered. If there are any changes in my medical history, I must inform the practitioner.

I confirm that I have been provided with verbal and written information about this treatment which includes aftercare and follow up advice and I agree to follow the aftercare advice and understand this reduces risk of adverse reactions and helps ensure optimum results.

I understand information about me will be treated as confidential and access to it restricted in accordance with the Data Protection Act, unless specific permissions given.

### **By consenting to treatment you accept the clinic terms and conditions as outlined:**

- You are satisfied that the treatment has been explained comprehensively
- That the possible risks and side effects associated with the treatment have been fully discussed and understood
- That you have taken sufficient time to process and consider the information provided and any questions have been answered to your satisfaction, before making a decision to proceed with the agreed treatment plan.
- You consent to your medical records being shared with appropriate professional staff
- You accept emergency intervention treatment if required