

INFORMATION SHEET BOTOX, FILLERS, PEELS, ECT

INTRODUCTION

This is an informal explanation of some of the common forms of treatment which people are wanting nowadays to improve their facial appearance. It is important to realise that although many of these treatment will achieve much the same result in removing or reducing wrinkles, they do so by different methods. Botox works by paralysing the muscles, which are responsible for facial expression and facial wrinkling. Fillers work by thickening the skin and literally filling the skin with extra substance making it stiffer, rather like injecting a super moisturiser into the skin. Peels work by causing a controlled superficial burn of the skin taking off the outer most layer, which in the healing phase tightens the skin and eliminates some of the superficial wrinkles.

Face lifting works by tightening the skin and the layers underneath it and putting the layers of fat in the face back into their right position, and so making the face look younger by converting the square looking jowl face into a youthful face with a parabolic curve to the chin and jaw line.

Forehead lifting or brow lifting puts the eyebrows back into their correct position and makes the upper part of the face look younger again because it corrects the ratios of the different parts of the face, converting them back to the ratios associated with a younger person and gets rid of the heavy look of the eyebrows associated with ageing.

I am sure that you will have read many articles on cosmetic procedures which can be done to the face, and you may have a very good understanding of it all, but you may also be rather confused. There are one or two broad principles, which are worth understanding at the beginning. Botox, which paralyses muscles, usually wears off in a period of 3-6 months depending upon the sensitivity of the individual and how much Botox is injected in the first place.

Fillers can last a variable length of time depending upon the type of filler, the size of the molecule of the material which is injected, and the speed with which the body breaks it down. Some fillers only last a few weeks, most last between 3-6 months but some can last up to 2 or more years. There are some permanent fillers but these are often considered hazardous because of the nature of the chemical substance which has been injected. This substance may prove very difficult to get rid of if one wants to, and because some people change their minds as to whether they want a permanent alteration they like the security of knowing that if they don't like it, it is going to correct itself anyway if it is a non-permanent filler.

Chemical peels have a long lasting effect in the sense that one can't go on repeating them for ever and ever because eventually one will take away all the layers of the skin, but the immediate benefit of a chemical peel may last only a few months initially and will then have to be repeated. It depends upon the kind of chemical peel that is being used. Some are very much more severe in their effects than others.

By contrast, surgical correction lasts for years rather than months, and most operations, like face lifting, eyelid correction and brow lifting, last anywhere between 5 and 15 years depending upon many factors.

COSTS

The price you pay for different treatments may be very different in different places. The cost of treatment can be divided up into 3 main parts.

1. The actual cost of the material that is being used.
2. The mark up charged by the institution for providing the treatment.
3. The charge made by the therapist or specialist for their time and expertise in administering the treatment and the service costs of administration, hire of rooms, insurance, etc.

The cost of materials will be in the region of £150-£400 for Botox, £250-£500 for fillers, £50-£600 for peels and plastic surgery operations may cost anything between £500-£10,000 depending upon how much is done.

Some institutions cost a very great deal to service because they are in the expensive parts of London where rates are high and the specialist expects to make a high mark up on the product and to charge a lot for his or her time. In the provinces expenses are usually lower and the specialists usually feel that it is exploitative to charge the same kind of rates as are charged in London. Nevertheless the expertise may be identical. In a phrase, you will probably pay a lot more for the same treatment if you want expensive addresses, plush pile carpets and smart looking elegant receptionists, but the outcome may be no better from a cosmetic point of view.

NB: Some specialists charge a great deal but others may use Botox, fillers, etc, as a loss leader in the hope and expectation that a percentage of patients will come to them for proper cosmetic surgery.

BOTOX

Botox is one of many types of similar products under different trade names. There are minor differences in the particular toxin which is being used to paralyse the muscles into which it is injected. When Botox is injected into a muscle the muscle stops working within 2-3 days. It is difficult to paralyse a muscle 100% because one can't see where the muscle is through the skin and one can only guess roughly where it is or feel it by getting the person to try and contract the muscle.

This is relatively easy in the frown lines between the eyebrows because the muscle lies close to the underside of the skin and can frown at will, and so one can feel the muscle contract under one's finger.

It takes about 10 units of Botox to get one of the corrugator muscles, as they are called, to stop working. It takes about 20 units to paralyse both muscles and it is worth while paralyzing 1 or 2 of the associated muscles on the bridge line of the nose at the same time. It is therefore common practice to use about 25 units of Botox to stop frown lines. This is usually one of the most effective uses of Botox and most people are quite pleased with the result.

It takes anything from 3 to 6 months for the effect to wear off. Botox is also used in other parts of the face particularly the forehead, around the eyes and around the mouth. It works very well at reducing the wrinkling of the forehead, the wrinkling of the crow's feet area around the eyes and the smile lines or festooning of the skin as someone smiles. It is virtually useless at getting rid of wrinkles in the upper eyelid. It is also of very little value in getting rid of the vertical crease lines of the upper lip, so-called smoker's lines. Smoker's lines can only be removed by injections of fillers or the use of chemical peels or dermabrasion.

Botox can be used in a very worthwhile manner to raise the corners of the mouth by paralyzing the muscles which tend to pull the corners of the mouth downwards (depressor anguli oris). In much the same way Botox can be used to raise the corners of the eyebrows by paralyzing the part of the muscle encircling the eye, which tends to pull the eyebrow downwards.

It is unusual to use more than 100 units of Botox in the face at any one time but in theory it is possible to treat the forehead, the eyelids, the frown lines and the mouth all at the same time (although most patients don't have as much as this done all at one go).

Botox also has an important role in controlling sweating. In one injects about 50 units of Botox just underneath the surface of the skin of the armpit one can eliminate sweating from that area almost completely for between 3 and 6 months. For people who have a problem of excess sweating it is a brilliant way of controlling it and most people prefer this to having an operation.

Botox in theory could be used to control sweating in the palms or the soles of the feet but I have not known it to be used in these areas because the operation of sympathectomy is usually considered to be the more appropriate method of controlling excess sweating of the hands or feet. Botox has a very important role traditionally in the control of spasm of muscles. Some unlucky patients who have neurological conditions need Botox injections regularly to stop conditions such as wry-neck or spasms in the thigh muscles to prevent contractures.

WHAT TO EXPECT FROM BOTOX INJECTIONS

Botox is dissolved in saline and should, in theory, be completely painless. However, any injection into a muscle causes a certain amount of pain and nobody likes to have needles pricked through their skin, and so some people find that Botox injections are quite painful, whereas others find it completely tolerable and nothing to worry about.

The injection causes a certain amount of bruising in most people but in the majority of cases there is hardly any blood at the injection site and most people can leave the clinic with only 1 or 2 red spots which are visible at the point of injection.

I would not recommend, however, that people come for a Botox injection session on an evening when they are due to go out for a special occasion.

Most patients experience a certain amount of swelling and bruising the next day which settles within 24 to 48 hours.

I have known of no patients who have decided not to have Botox because they couldn't tolerate the discomfort of injections.

The effect of the Botox usually takes 2 to 3 days, but in a few patients it is quicker than this and in a few patients it takes longer.

COMPLICATIONS OF BOTOX

The only serious complication of Botox which I have experience of is to cause unequal effects on the 2 sides of the face, due to one muscle becoming paralysed more than another, i.e. one eyebrow lifts more than the other or the corners of the mouth lift more on one side than the other. This is usually fairly easily remedied by injecting a bit more on the side which is less affected.

The only other common complication is that the patients are disappointed with the effect because they had been expecting a more dramatic change. There is no doubt that there is a failure rate of Botox in terms of its cosmetic benefit but I would put this at only 5-10% of patients.

There may be a certain amount of variability of the quality of the Botox material, and there is undoubtedly variability in the responsiveness of different individuals. Some people are very sensitive and some people are relatively insensitive to it.

The British made product, Dysport, which is one of the main competitors of Botox, can work sometimes when Botox doesn't seem to work as well as it is expected to do.

The most important theoretical risk of Botox is to cause a paralysis of the muscle responsible for lifting the eye. If Botox penetrates through the orbital septal membrane by filtering down from the forehead, it is capable of causing droopiness of the upper lids. This can be an enormous embarrassment because it seldom happens on both sides in equal degree and patients don't want to end up with apparently droopy eyelids.

I have never seen it in any patient of my own but I do know of cases occurring where large quantities of Botox have been injected into the forehead to try and eliminate the wrinkle lines of the forehead. One, therefore, has to be cautious about where and how much Botox one injects into the forehead. There is no immediate antidote to Botox. One can't suck it out or neutralise it where it has been injected and so if it causes a weakness of a muscle greater than wanted, there is not much one can do about it except wait for it to wear off. It will usually take between 3 weeks and 3 months before a noticeable improvement occurs. I have never known

a muscle not to return to normal activity following a Botox injection. However, some people claim that it can last for 6 to 12 months rather than the usual 3 to 6 months.

SPECIAL CASES

Occasionally patients have a particular problem which requires only a tiny dose of Botox in one small muscle which is behaving strangely, such as a flickering muscle close to the eye or the corner of the mouth drooping down one side as compared to the other. Patients with facial palsy sometimes benefit from having the non-paralysed side reduced in activity to balance the side of the face that hasn't recovered fully.

I hope that this introduction demonstrates to you that the use of Botox can be very versatile, and that everybody is different in their needs, and that one must try and tailor the use of Botox to the individual requirements. One should never consider that Botox has failed until at least 2 or 3 visits have occurred so that the dosage can be adjusted to meet the requirements of the particular individual.

FILLERS

There are a bewildering number of filler substances on the market nowadays. There are at least 20 in common use. Some are designed to try and promote the body into making more collagen or "ground substance" and thus swell out the skin and reduce the depth of wrinkles. One can regard these as dynamic insofar as there isn't much noticeable change immediately after injection.

It is as though they swell out the tissues after they have been injected over a period of weeks. Such substances include Restylane, Vital and Nufil. These are the commonest type which merely swell out the middle and superficial layers of the skin with a substance which is naturally found in the skin already called hyaluronic acid. One could regard this type of filler as static. It has an immediate effect on the appearance of the skin, although it may take another 24 hours for the effect to smooth out and for some of the initial swelling and redness to fade. The size of the molecule which is injected influences the speed with which the injected substance breaks down because the body always gets to work on the injected substance so that eventually it dissolves away. Some substances last for only 2 to 3 months and some last for almost a year or more.

In the past products have been made which cannot be broken down by the body. These can be classified as permanent fillers or implants depending on whether they are semi-liquid or solid. Most of these are very well tolerated but in a very small percentage of people there is a vigorous reaction against them and the person finds themselves with chronic soreness in the area of the implant which is virtually impossible to get rid of.

I have, therefore, always avoided the use of anything which was so-called permanent and injectable because I knew that if there was an adverse reaction it would be almost impossible to control it. I have put in permanent soft material such as Gortex and various type of artificial skin which can fill out areas which are indented or hollowed. These can work extremely well for a long time but most of them eventually go hard and some patients want them removed. This is usually not too difficult but it does require another operation.

If you research the topic I am sure you will come across the name of a filler which I have not heard of because new products are coming onto the market almost every week. The difficulty is knowing who to trust in terms of the safety of the product and whether it is as good as or better than the ones which have been around for longer.

I am relatively conservative in my approach and tend to stick to a small number of products whose effects I know relatively well.

There was a period of about 10 years during which the commonest filler was collagen derived from cattle in the United States. This was fine and was relatively painless and was quite effective at achieving what one wanted. The collagen would break down over a period of 3 to 6 months as expected and new collagen would have to be injected. It was relatively painless to inject but worries about the safety of collagen became paramount with concerns about mad cow disease (CJD) and ensuring that the source of the collagen could not come from cattle infected by this prion. I have not used collagen for 2 or 3 years now even though it is still available and I will only get it especially on request by a patient who prefers it to any of the alternative fillers which are not of cattle origin.

Most of the fillers are of bacterial origin or are straightforward chemicals which can be made up in the laboratory. These have no risk of causing infection.

COMBINED USE OF BOTOX AND FILLERS

There are certain circumstances where Botox is insufficient to stop wrinkles but filler is also not completely effective and it is therefore worthwhile using both at the same time. This is particularly true of the frown lines between the eyebrows in someone who has had very deep frown lines for a long time. I seldom use fillers to try and reduce the wrinkles at the crow's feet or in the lower eyelids, but I certainly use fillers to correct the so-called tear trough which is the groove running down from the inner corner of the eye towards the cheek.

DERMABRASION & CHEMICAL PEEL

I have written an information sheet on this subject and if you would like to know more about this topic please ask for an information sheet from my secretary Michele Gangar, on 0116 2653043.

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