

THE RIGHT CANDIDATE

Following on from his article in last month's issue, **Dr Tim Eldridge** discusses patient assessment for non-surgical rhinoplasty



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The last article examined how medical or non-surgical rhinoplasty with hyaluronic acid (HA) fillers is proving to be an attractive alternative to surgical rhinoplasty. Re-shaping the nose with HA fillers, such as Perfectha Deep, is a minimally invasive procedure with very little downtime.

A thorough knowledge of the anatomy of the nose and a gold standard aseptic technique is required to produce the desired aesthetic result. However, like any HA treatment, a detailed facial and patient assessment coupled with patient selection is essential in non-surgical rhinoplasty.

The patient's desired outcome or presenting complaint is one of the most important aspects to document. However, the patient may present with numerous mixed emotions and may be uncertain which area of the face requires treatment. It is essential that the patient should be psychologically stable without conditions such as dysmorphia, depression or obsessive compulsive disorder. Some of the things to discuss in the initial consultation are:

- Reason for attendance
- Patient's perception of overall appearance
- Patient's expectations
- Patient's co-operation
- Patient's understanding of diagnosis and treatment including side effects and alternatives
- Patient's understanding of longevity of treatment

One of the first parts of the assessment is a detailed medical history and history of previous treatments, whether surgical or non-surgical, and any adverse reactions experienced. For the purpose of this article all of the above is assumed favourable.

The article concentrates on analysing the caucasian face, but one must remember ethnicity plays a major factor in treatment planning. Nowadays clinicians must consider the face in a three-dimensional manner, incorporating volume, texture, bony support and muscular activity. It is ill-advised to concentrate on only one aspect of the face, if a harmonious effect is to be created. Often however, treatment is determined by the patient's desires or budget.

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both the frontal view and the profile view. From the frontal view the face is divided into vertical fifths for assessing symmetry, and into horizontal thirds for assessing volume.

HORIZONTAL THIRDS

The face is divided into thirds from the hairline to the glabella, the glabella to the sub-nasale, and the sub-nasale



to the chin. (The lower third is further subdivided into thirds).

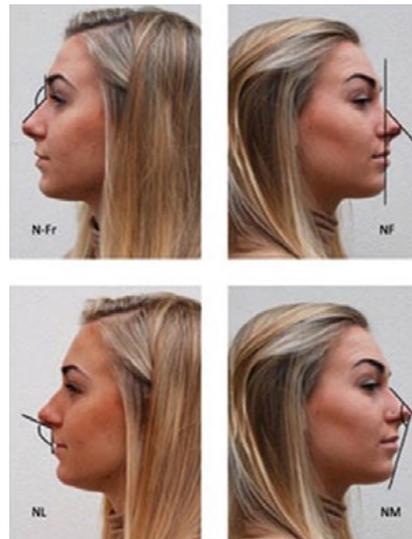
VERTICAL FIFTHS

The face is divided into fifths, from the outer part of the ear to the left lateral canthus' the lateral canthus to the inner canthus; the inner canthus to the right lateral canthus, and the right

lateral canthus to the outer part of the ear on the right.

PROFILE VIEW

The determinants of what is aesthetically pleasing varies between ethnicities/populations. There is no ideal answer, but there are a range of angles which are considered to be fundamental to producing a desirable result. It is advisable not to augment the nose on the patient's initial visit, for two reasons. First, implied consent should be sought before any treatment commences; second, a series of photographs must be taken to help analyse the nose and face in more detail and aid in determining how to augment the nose. The appropriate level of consent for taking and using clinical photographs must be gained.



The recommended views are:

- Frontal
- 45° right
- 45° left
- 90° right
- 90° left
- Basal view - inferior projection (photograph from beneath nose aiming upwards)
- Superior projection (photograph from above nose aiming downwards) >

AREA	DESCRIPTION	ANGLE
Naso-frontal angle (N-Fr)	Inclination of forehead and nasal projection	115°-135° men; 120°-125° women
Naso-facial angle (NF)	Midline of nose and facial plane	30°-40°
Naso-labial angle (NL)	Inclination of columella to upper lip	90°-95° men; 95°-110° women
Naso-mental angle (NM)	Junction of nose and chin midline	120°-132°

Alignment of the head is carried out using the Frankfort Horizontal Plane (the line connecting the lowest part of inferior orbital rim to the upper margin of the bony auditory meatus). This will help ensure pre- and post-treatment photographs are taken at a similar plane.

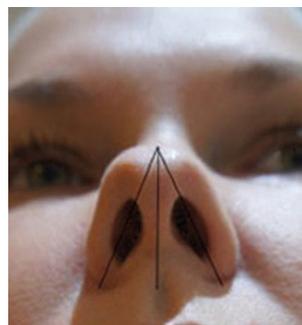
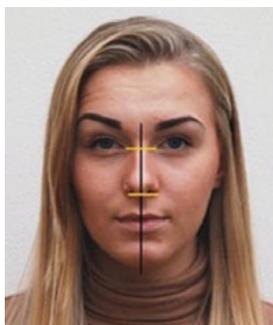


Using the photographs, it is easier to identify those important angles mentioned earlier. With a protractor it is possible to draw those angles on the photograph and with the availability of good quality tablets, it can be even more straightforward (you can even use tablet to take the photograph). Photographs are an important aid in treatment planning.

IDENTIFYING DEVIATIONS

On the frontal photograph draw a line from the middle of the glabella to the middle of the chin. Ideally this line should divide the nasal tip and cupid's bow (black vertical line). This will identify any asymmetry and deviations. The width of the alar base should be the same as the intercanthal distance (yellow horizontal lines). Deviations can be difficult to eliminate completely with filler – usually they are just camouflaged.

Using the basal view photograph, the nose should have similar proportions to an equilateral triangle.



CAN THE NOSE BE AUGMENTED?

Again, photographs to help determine if augmentation is possible. Using one of the 90° profile photographs, draw a vertical line (90°) upwards from the maximum projection of the upper lip, dividing the nasal base and the apex of the nasal tip. If more than 50% of the nose is posterior (behind) this line, the nose can be treated with fillers.



WHERE WILL THE FILLER BE PLACED?

Again using one of the 90° profile photographs, one can determine how much of the dorsum, or if the dorsum of the nose requires treatment. Draw a line from the nasofrontal angle to the nasal tip. In women the dorsum should lie approximately 2mm posterior behind this line (less in men). If the dorsum lies more than 2mm posterior to this line, it can be augmented with fillers. If the dorsum lies anterior to this line, it is not advised to augment the dorsum, restrict treatment to the nasal tip and the nasofrontal angle.

SKIN THICKNESS

When undertaking non-surgical rhinoplasty, skin thickness is not an issue in itself, both thick and thin-skinned patients can be treated. However, any irregularity in filler placement will be apparent in thin skinned individuals. The choice of material with thinner skin would be a fine particle filler, such as Perfectha Derm. For thicker skinned patients, larger particle fillers are required to expand the skin, an example of which is Perfectha Deep.

Performing a detailed facial assessment, can determine the correct treatment for the patient and the order in which the treatment should be performed. If the assessment is three dimensional the treatment must follow the same principles to enhance every aspect of the face. During the assessment, the clinician must be mindful that the photograph often highlights other areas of the face which will require treatment. This is a consideration in treatment planning and should always be discussed with patients to achieve the best result possible. **AM**

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