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## VASCULATURE

There is no real risk of major injury of the vascular or nervous structures caused by injections of filler. Vasculature is very high, but the blood vessels are small in size with the exception of the internal angular area of the eye.

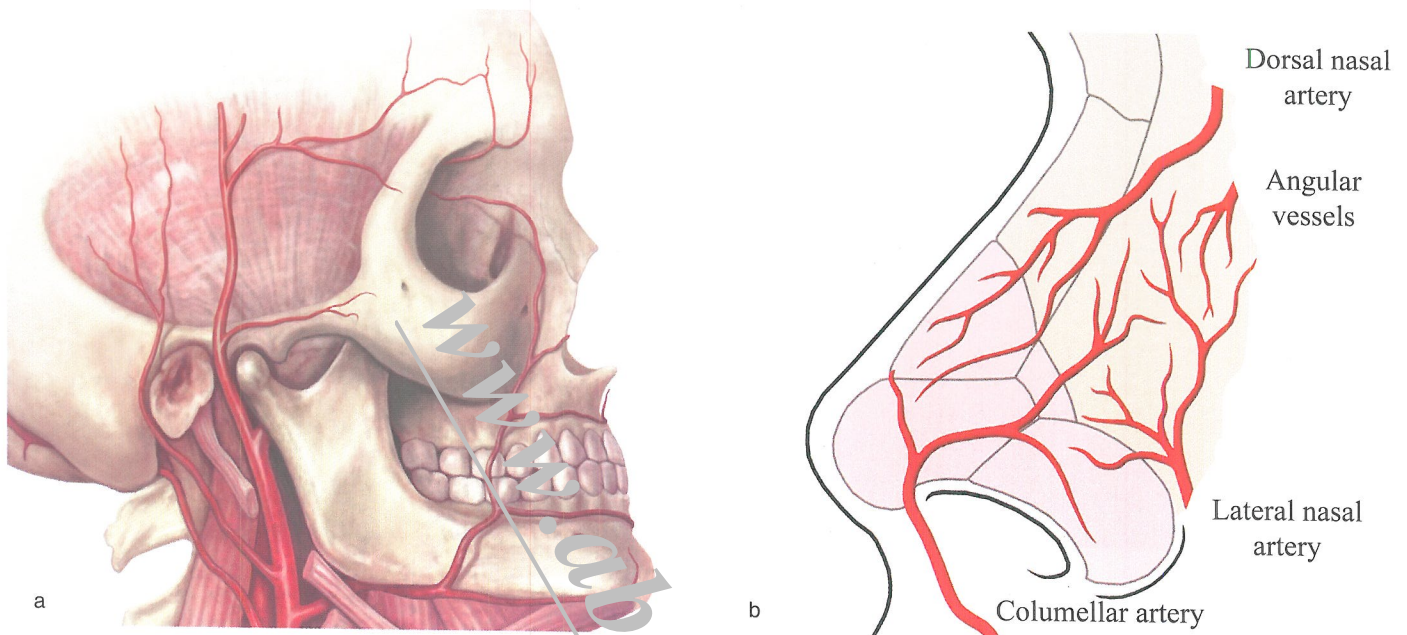


Fig. 2.16 a-c: this vascularisation is provided by the arterial branches of the internal carotid branches (ophthalmic artery), ending at the level of the nose with the angular vessels and with the dorsal artery of the nose.

From the external carotid, then from the facial artery, the terminal branches run to the nose, namely the columellar and lateral artery of the nose. The veins generally drain mostly towards the angular vein, intracranial circle and also towards the facial vein.



We have the great fortune to study the vascularisation in this image which has been directly taken from a corpse (c). In the picture you can see the predominant blood supply running from the angular and especially lateral branches, tributaries of the facial artery. You can also see the dorsal and angular branches coming from the intracranial circle of the internal carotid.

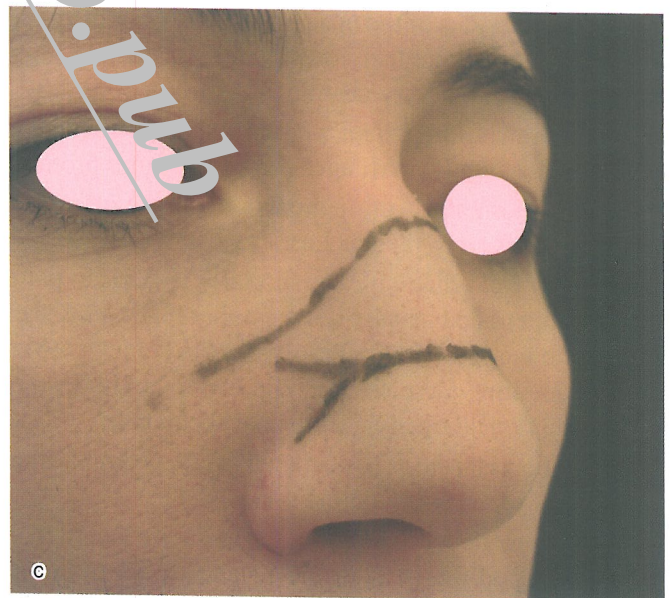
By Saban Y. and Braccini F.  
Rhinoplasties, les monographies du cca groupe. N° 32, Ed.2002

## THE SKIN

The skin, rich in sebaceous glands, especially in the part covering the cartilaginous nose, considerably varies its thickness from region to region.

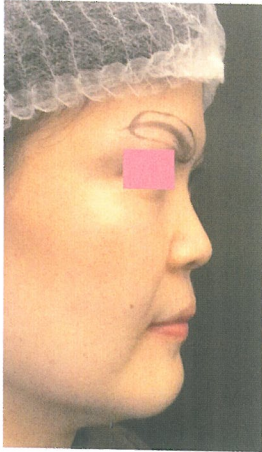


Fig. 2.18 a-c: we mention, very quickly, the fact that the superficial layer covering the human body consists of the epidermis, which is made of four layers, the corneum stratum, the basal stratum and the subcutaneous stratum, which is highly variable depending on the body regions. The nasal skin is pretty thin and at the level of the tip as it becomes thicker, particularly in the triangle at the base of the nose (a).



The **nasal skin**, in the segment that rests on the bony nasal pyramid, then above the nasal bones, it is quite mobile and not adherent (b). It becomes more adherent to the subcutaneous levels in the portion that corresponds to the cartilages. This adherence is particularly intimate on the lobules, on the wings and the nasal tip (b-c). The subcutaneous cellular tissue, underdeveloped and poor in fat, does not form a sharp layer except at the level of the mobile nose (a-c).

## STUDY OF FAR EASTERN ASIAN PATIENTS



As examined in the chapter on anatomy, Far East Asian and African patients have numerous differences from Caucasian patients. In particular they have a much flatter nasal bridge with a rather thin subcutaneous layer on the ridge and in the glabellar region while usually it is more abundant in the area of the tip.

This nasal bridge, quite flat and not well-delineated, is often seen by the patient from the Far East or Africa as a flaw characterizing their race and quite often esthetic doctors are asked to correct it and create a better delineated bridge, we could say more "European".

Obviously, before continuing with this procedure in these patients it is of fundamental importance to study the nasal angles exactly as we have seen in the Caucasian patient.

Below we can see the average measurements in the Far East Asian and African patient.

Fig. 3.2: In Far East Asians main angles are always quite different.

## MAIN NASAL ANGLES IN FAR EAST ASIAN PATIENTS



Fig. 3.3: two cases of Far Eastern patients. Nasofrontal angle (a, f), dorsal angle (b, g), nasolabial angle (c, h), facial angle (d, i) and finally, nasomental angle (e, l).

## THE TECHNIQUE

The patient should get into the office at least half an hour before the session to be prepared with the anaesthetic cream (a). In the first treatment session or in a previous session, it is necessary to talk freely with the patient about the technique and the possible risks, so that the patient can be actually aware of every detail and can take an informed decision <sup>(42)</sup>. After that, the patient always signs a written informed consent (see Chapter 10).

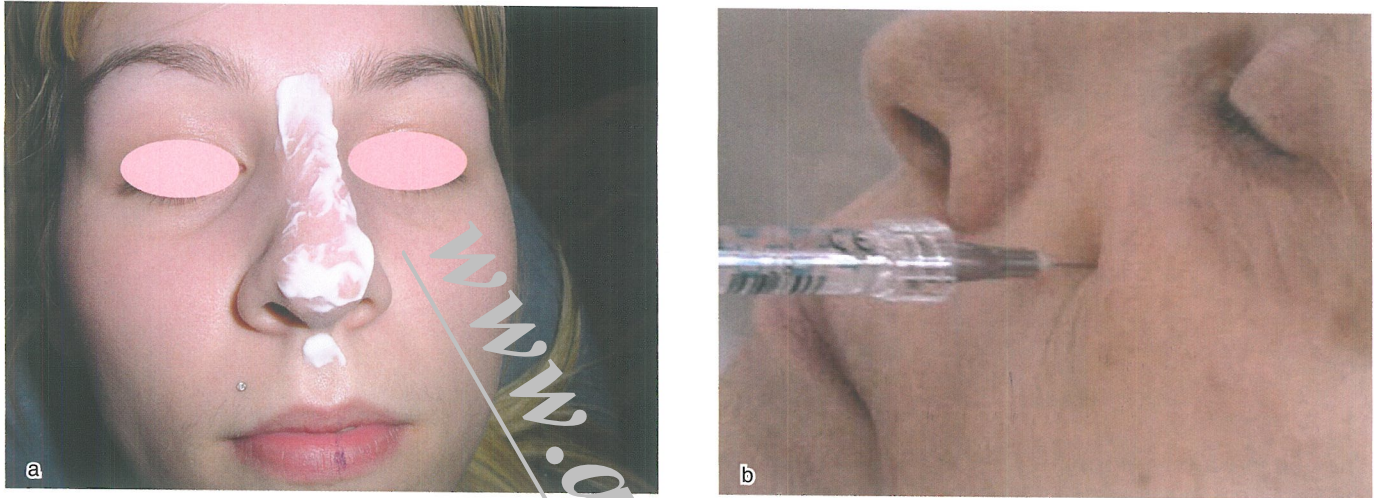
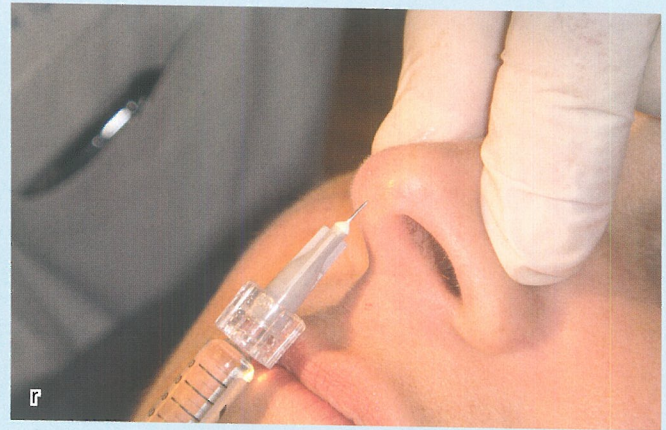
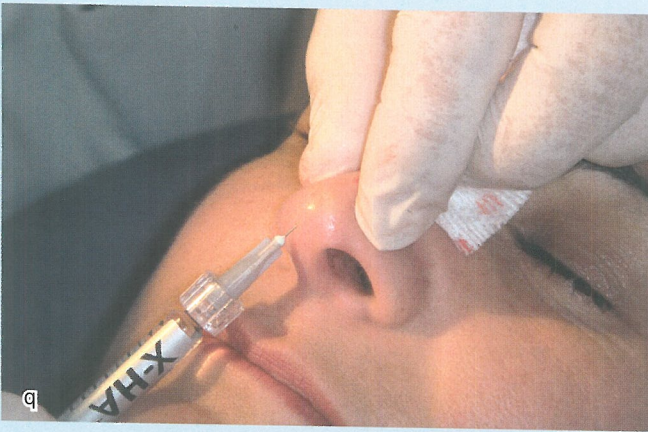


Fig. 6.2 a-i: the patient is prepared with topical anaesthetic cream (a), exactly where the injections should be made. Then, we put the anaesthetic cream over all the nasal profile, especially at the root and more abundantly at the tip, at the lobules and on the nasal spine. In some patients, however, you can make the correction without any anaesthesia. The nasal tip is the most sensitive. It is absolutely necessary to make a good treatment plan before beginning the injections. This is done after the photographs to the patient (see Chapter 3 and 4), and having studied in detail all the nasal angles and the relations of the nose with the nearby tissues. The injections must be made very gently and carefully to avoid cutaneous suffering. You can exceptionally make a tumescence anesthesia with Carbocaine or Xilocaina. In this case, we make it at the level of the infraorbital nerve (b).

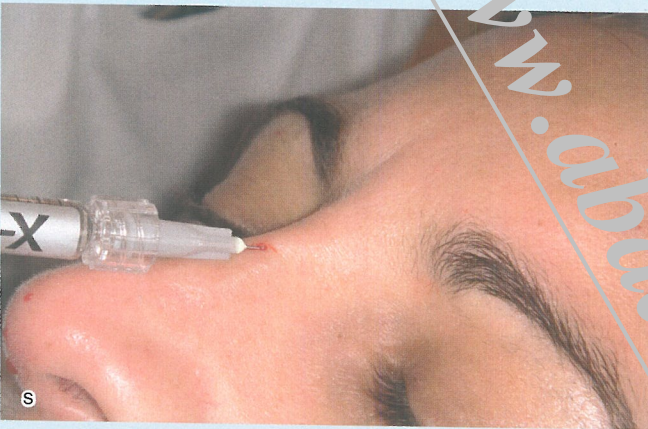


The nasal tension, especially at the nasal tip is so high that if we make too many injections or overfill the lobules, the product tends to go out and to be extruded (c).

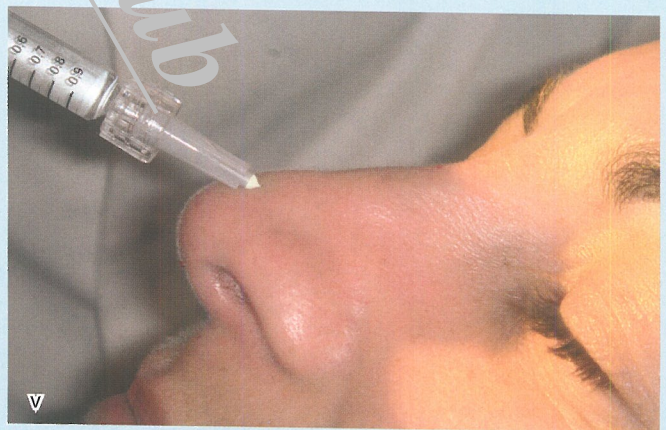
Here as follows we describe the main step of treatment in addition to which we will add a few injections and then we will refine the correction.



We begin treatment with the tip of the nose. The depth of the implantation is fundamental. We must not be too superficial nor too deep in the cartilage, but in the subcutaneous space which is rather thick at this level (q-r). As we have said several times, the injection must be slow and progressive to avoid damage to the surface skin. The contralateral thumb and index finger help reach the correct position.



Immediately afterwards we follow with the injection at the root of the nose (s-t). The needle penetrates slightly above the rhinion, and proceeds in depth along the bone margin. We do a linear backwards injection, slow, taking care to not inject too much material. Our movements must be slow and well-guided, trying to eliminate any tremor, perhaps by resting the syringe on the other hand.



Finally we make the injection at the columella level, which can be done from the front on the bisector of the nasolabial angle, or on the side (u). We also correct the left lateral asymmetry of the triangular cartilage (v). Here the skin is more attached to the deeper levels and it is therefore necessary to pay close attention we are at the correct subcutaneous level. The injection is radial, gradual. It is helpful to use the contralateral index to feel the filler as it is injected.