It is generally agreed that the inter-alar distance usually equals the inter-canthal distance in the neo-classical Caucasian face. However there are ethnic and personal differences.

Alar flaring is defined as the lateral aspect of the alar extending significantly beyond the alar facial groove. In an attempt to avoid external scarring, some authors describe the use of cinching sutures to approximate the alar rims and narrow the nasal base; however these suturing methods failed to gain popularity.

A simple approach is to reduce the alar base by wedge excisions, sparing entering into the nasal cavity and aiming to avoid over straightening of the alar i.e. to preserve the natural curvature of the alar rim and avoiding any incisions into the opening of the nostril. If this is not enough, this could be combined with nasal sill excisions for correction of excessive nasal flare.

Pre-operative assessment
1. Assessing the caudal nasal septum should be done to exclude dislocations or deviations, as correction of de-projection will improve asymmetry and excessive alar flare.
2. Position of the nasal tip and definition should be assessed as well, as modifications of the tip will alter the width of the nasal base.
3. Good differentiation between excessive alar base width and excessive degree of alar flare should be noted.
4. Thickness of the nasal skin and the level of insertion of the alar lobule into the upper lip should be assessed.

Surgical technique
As mentioned previously, surgery of the nasal base should be done following tip surgery, as any changes in tip definition or projection will influence the configuration of the base.

1. Wedge excisions are marked before injecting the local anaesthetic vasoconstrictor solution, if sill excisions are required the amount of sill resection is marked as well.
2. The alar facial groove is marked first, and then the wedge is completed. The sill area is marked as a wedge based inferiorly (inverted ‘V’ shaped incision).
3. Following injection of the local anaesthetic vasoconstrictor solution, the wedge alar base excisions are done first using number 11 blade followed by meticulous haemostasis (see Figure 1).
4. Retraction of the ala with a skin hook (Figure 2), will allow good exposure of the wound and good haemostasis. The advice is not to remove more than 4mm in the same sitting.
5. Sill excision is done next with meticulous haemostasis.
6. No need for muscle detachment or violation.
7. Closure in two layers, deep Vicryl 5-0 sutures will prevent excessive tension on the skin edges and closure of the skin is accomplished by simple interrupted 6-0 Prolene sutures, and antibiotic cream applied over the wound (see figures 3 and 4).

This technique of reduction is usually gratifying, however maintaining the curvature of the nasal aperture is crucial to obtain good results, loss of this curvature will lead to straight insertion of the ala into the upper lip area, which is a disfiguring arrangement and unnatural.

To avoid that, be conservative with alar base reductions, not more than 4mm from each side on each sitting, this procedure could be redone following complete healing, a year down the line. It is better to wait rather than dealing with such a difficult deformity.

The incision should be made in the alar facial crease only, there is no need to extend the incision superior to the alar level, as the scar will be very obvious – and always close the wound in two layers. Every patient should be informed of the possibility of impairment of the nasal airway and the further need for derm-abrasion to improve their alar scars; especially patients of Afro-Caribbean descent who are more liable to develop scar keloid formation.

I prefer to do this procedure under general anaesthetic, however if done solely it could be easily done under local anaesthesia with sedation.

Finally alar base reduction should be done at the end of rhinoplasty as changes to the tip will lead to changes to the base.

Conclusion
Assessing the need for reducing the alar base should be taken following assessment of the tip definition and projection. Alar base reduction is not a routine part of rhinoplasty and it should be tailored to each particular patient.

References