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Septoplasty and turbinate reduction

Information for patients — please read before your consent appointment

This leaflet explains what a septoplasty is, what it can and cannot achieve, what the alternatives are, and what the risks are. Please read it before your pre-operative appointment and bring any questions with you. It is meant to support the conversation with Dr Vermaak, not to replace it.

Your septum and why it matters

The nasal septum is the partition that divides the inside of your nose into a left and a right passage. The front two-thirds is cartilage; the back third is thin bone. Both are covered by a delicate lining called mucosa.

Very few people have a perfectly straight septum, and most deviations cause no trouble at all. Surgery is considered only when the deviation narrows the airway enough to affect your breathing, your sleep, or your quality of life, and when simpler treatments have not resolved it.

What a septoplasty involves

A septoplasty straightens the septum. The whole operation is performed through the nostrils using an endoscope or a headlight, so there are no cuts on the outside of the nose and no visible scars.

Through a small incision inside one nostril, the surgeon lifts the lining away from the cartilage and bone underneath. Bent sections are then reshaped, repositioned or removed, and the lining is laid back down and secured. Only the deviated portion is removed; a supporting strut of cartilage is always left behind to keep the shape of the nose stable.

Important: a septoplasty is a functional operation. It is done to improve your breathing and it does not change the external appearance of your nose. An operation that alters the shape of the nose is a rhinoplasty, which is a different procedure with different considerations.

At the end of the operation

Dr Vermaak will use one of the following to keep the septum in position and control oozing. Which one is used depends on what was found during surgery, and it may only be decided in theatre.

METHOD	WHAT IT MEANS FOR YOU
Quilting sutures	Fine dissolving stitches placed through the septum. Increasingly preferred, because they hold the lining down without the discomfort of packing. Nothing needs to be removed.
Septal splints	Thin, soft plastic sheets on either side of the septum, held with a stitch. Usually removed at your first post-operative visit, around day 5 to 7.
Nasal packing	Dressing material placed in the nasal passages, used mainly if there has been more bleeding than usual. Normally removed within 24 to 48 hours. It is uncomfortable, and it is used less often than it once was.

Surgery to the turbinates

The turbinates are ridges of tissue on the side wall of each nasal passage. They are not simply obstructions: they warm, humidify and filter the air you breathe, and they carry the nerve endings that give you the sensation of breathing freely.

When the septum is bent to one side, the turbinate on the opposite side often enlarges over time to fill the extra space. Straightening the septum alone may then leave that side feeling blocked, which is why turbinate reduction is frequently done during the same operation.

- **Conservative reduction is the modern standard.** The turbinate is reduced from within, or repositioned outwards, while the surface lining is preserved. Techniques include submucosal reduction, radiofrequency or microdebrider turbinoplasty, and outfracture.
- **Complete removal of a turbinate is avoided.** Aggressive or total turbinectomy is associated with long-term dryness, persistent crusting, recurrent bleeding, and in rare cases a distressing condition called empty nose syndrome, in which the nose feels blocked despite being wide open. Preserving turbinate tissue is the single most important way to prevent this.

Is surgery the right choice for me?

A blocked nose has many possible causes, and a deviated septum is only one of them. Allergy, non-allergic rhinitis, nasal polyps, chronic sinusitis and collapse of the nasal valve can all produce identical symptoms, and they respond to different treatments. This is why medical treatment is normally tried first.

Non-surgical options usually tried first

- A steroid nasal spray used correctly and consistently for at least six to eight weeks
- Regular saline rinses or sprays
- Allergy testing, antihistamines, and reducing exposure to identified triggers
- Treating any co-existing sinus infection
- Weight reduction, alcohol moderation and side-sleeping where snoring or sleep apnoea is the main concern

What the evidence shows

Two large randomised trials have compared septoplasty directly against medical treatment in adults with a deviated septum and nasal obstruction:

- **NAIROS (United Kingdom, published 2023).** Adults were randomly assigned to septoplasty or to a defined medical programme of steroid and saline spray. At six months, the surgical group scored about 20 points better on the SNOT-22 symptom questionnaire, which is well beyond the difference patients consider meaningful.
- **The Dutch trial (published 2019).** Septoplasty, with or without turbinate surgery, produced better quality-of-life and airflow results than non-surgical management, and the benefit was still present at 24 months.

Pooled analysis of these trials confirms a clear symptom benefit at six and twelve months, with a low rate of complications. In everyday practice, roughly six to eight patients in ten report that their breathing is clearly better afterwards.

> **What septoplasty is less reliable for**
>
> Surgery is most predictable when your main complaint is a blocked nose. It is much less predictable for headache, facial pain or reduced sense of smell, and it is not a treatment for allergy. If those are your main symptoms, discuss them specifically with Dr Vermaak before agreeing to surgery, because they may not improve.

Preparing for your operation

TASK	DETAIL
Medication review	Tell us about every medicine and supplement you take. Blood thinners (warfarin, rivaroxaban, apixaban, clopidogrel), aspirin, anti-inflammatories, and supplements such as fish oil, ginkgo, garlic, ginseng, vitamin E and turmeric all increase bleeding and usually need to be paused. Never stop a prescribed blood thinner on your own; we will arrange this with the doctor who prescribed it.
Stop smoking and vaping	Ideally at least four weeks before surgery. Smoking narrows the small blood vessels that heal the nasal lining, and continued smoking is one of the recognised predictors of a poorer result.
Buy your rinse kit early	Buy a large-volume saline rinse kit (for example a Flo or NeilMed sinus rinse) and refill sachets before your surgery date. You start rinsing the day after the operation, so it needs to be at home already.
Arrange transport and support	You may not drive yourself home. Arrange a responsible adult to collect you and to stay with you for the first night.
Fasting	Follow the fasting instructions in your admission email exactly. The anaesthetist may adjust them.
Time off	Plan on about one week away from work or school, and two to four weeks away from sport and heavy physical work.
Tell us in advance	If you use CPAP, have a bleeding disorder, are pregnant or might be, or have had previous nasal surgery.

On the day, and the first few days

The operation is done under general anaesthetic and usually takes 30 to 60 minutes. Most patients go home the same day; some stay one night, particularly if turbinate surgery was extensive or if there has been more bleeding than expected.

When you wake, your nose will feel blocked and you will be breathing through your mouth. This feeling is expected and is caused by swelling and blood clot, not by a problem with the surgery. Medication for pain and for nausea will be available. Your mouth and throat will feel dry.

You will be given a separate post-operative instruction sheet before you go home. The most important points are that you begin saline rinsing the day after surgery, that you do not blow your nose, and that you avoid heavy lifting and straining.

Risks and complications

Septoplasty is a common and generally safe operation, but no operation is without risk. The figures below are drawn from published reviews of septoplasty outcomes and are approximate; your own risk depends on your anatomy, your health and whether you have had previous nasal surgery.

Expected after any septoplasty (not complications)

- A blocked nose for two to three weeks, sometimes longer
- Blood-stained discharge for several days
- Crusting inside the nose for two to four weeks
- Mild to moderate pain and pressure, and sinus-type headaches that can recur for a few weeks

- Temporary numbness of the upper front teeth, the upper lip and the tip of the nose, which usually settles over weeks to months
- Temporary reduction in the sense of smell and taste

Recognised complications

COMPLICATION	APPROXIMATE RISK	WHAT IT MEANS
Bleeding needing treatment	About 4 in 100	Most settles with pressure and a decongestant spray. Occasionally packing or a return to theatre is needed.
Persistent or residual deviation	About 13 in 100	The septum is not fully straightened, or bends again as it heals. Some patients need revision surgery.
Adhesions (scar bands)	About 4 in 100	Scar tissue joins the septum to the side wall, causing blockage. Usually divided easily in the rooms.
Septal haematoma	About 2 in 100	A collection of blood under the lining. Needs prompt drainage, because pressure can destroy the cartilage. This is the main reason to report sudden worsening blockage and pressure.
Septal perforation	About 2 in 100	A hole through the septum, which may cause whistling, crusting or nosebleeds. Many are small and cause no symptoms.
Infection	About 1 to 3 in 100	Usually treated with antibiotics. A septal abscess is rare but needs urgent drainage.

Rare and very rare

- A change in the external shape of the nose, such as a drop in the bridge or the tip
- Permanent reduction or loss of the sense of smell
- Empty nose syndrome, associated with aggressive turbinate removal, which is why conservative reduction is used
- Toxic shock syndrome, a very rare but serious reaction associated with packing or splints, which is why sudden high fever with a rash, vomiting or diarrhoea must be reported immediately
- Leak of cerebrospinal fluid, or injury to the eye or its nerves, both exceedingly rare
- Complications of general anaesthesia, which the anaesthetist will discuss with you

Questions worth asking

- Is my blocked nose caused mainly by the septum, or is allergy or another condition also contributing?
- Will you also be reducing my turbinates, and by what technique?
- Do you expect to use splints or packing, and when would they come out?
- Given my particular symptoms, what improvement is realistic?
- What happens if my breathing does not improve?

This sheet does not replace your consultation. Please bring your questions to your consent appointment.