Rhinoplasty 2 Rhinoplasty





Satisfy expectations of the patients

Today, the majority of rhinoplasty requests concern noses that are too large, too wide, or with a bump to correct.

This procedure is considered to be the most complicated in facial plastic surgery. Every gesture, every millimeter has an impact on the result

For the patients, the fears are quite high and the expectation just as important!

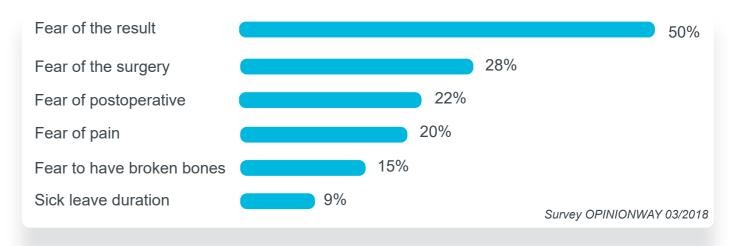
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Read carefully the instructions for use available on www.satelec.com/documents

The patient's fears

According to an opinion poll, the main reasons patients avoid rhinoplasty surgery are:



M+ rhinoplasty solution^{1, 2}

Piezoelectric technology benefits have been proven over the years to enhance intraoperative advantages and postoperative outcomes.

Operating room certified, ACTEON medical M+ piezoelectric solution is of growing interest among surgeons: safer clinical procedures, improved healing and reduction of post-surgical pain are the main benefits in using M+.

M+ devices are used for rhinoplasty surgeries where precision, safety and efficacy are a priority. The bone volume is preserved thanks to highly precise cuts, linear tip vibrations, controlled and regular tip amplitude.



In comparison, rhinoplasty with manual instruments is more invasive for the patient and less precise for the surgeon.

The bones are broken blindly. Sometimes the bones don't break where expected and this leads to aesthetic defects that not only are impossible to hide but may result in breathing issues.



After manual rhinoplasty



6 days after ultrasonic rhinoplasty

- 1 The Role of Piezoelectric Instrumentation in Rhinoplasty Surgery: Olivier Gerbault, MD; Rollin K. Daniel, MD; and Aaron M. Kosi,s, MD November 6 2015
- 2 -Piezotome rhinoplasty reduces postsurgical morbidity and enhances patient satisfaction: A multidisciplinary clinical study. A.Troedhan. YJOMS57235 J Oral Maxillofac Surg 2016

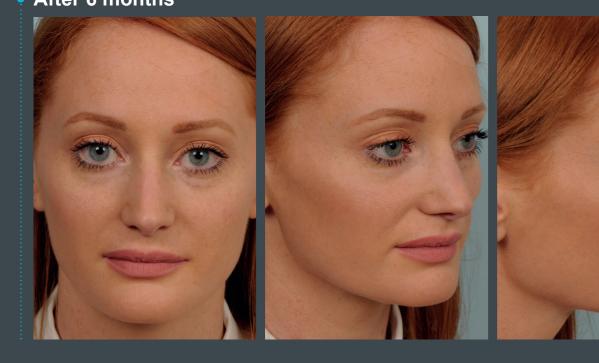
My Rhino sculpture

Before





• After 6 months



It is a violent operation during which we imagine the surgeon hitting his chisel with a hammer to fracture our nose.

I had already thought of rhinoplasty to correct a hump on my nose, but it scared me. I wanted a less traumatic technique for my nose and for me.

If the operation lasts a little longer, from one hour and up to three hours, the

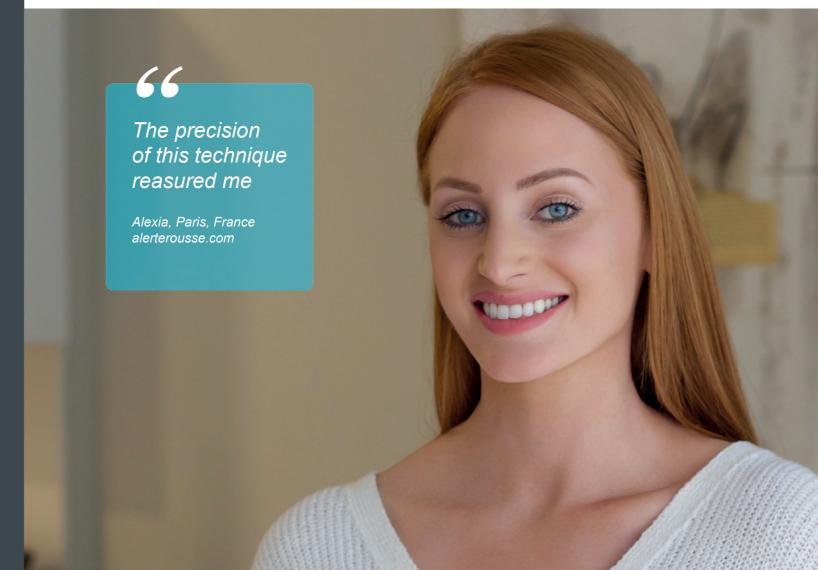
precision of this technique reassured me. I didn't want a small «American» nose but something natural, which matched the morphology of my face.

I am totally satisfied with the result."

Alexia, Paris, France alerterousse.com

Listen to her experience on our YouTube page





Primary rhinoplasty

Preservation high strip technique

Dr. Olivier Gerbault is board certified with the Association of Physicians in reconstructive and cosmetic plastic surgery. He entered on the roll of the order of the Val de Marne.

Dr. Gerbault is former resident of the Hospitals of Paris and former Chef de Clinique - Assistant (Fellow) at Saint-Louis Hospital (Paris).

He's professor of the International **Society of Aesthetic Plastic Surgery** (ISAPS) and teaches every month rhinoplasty, especially ultrasonic rhinoplasty, to surgeons coming from all over the world.

Preservation techniques of the dorsum have become very popular in recent years, especially for correcting minor humps that are not too asymmetrical and have a favorable shape.

The principle is to avoid opening the upper lateral cartilages and to maintain the osteocartilaginous junction continuity at its central part. Long ultrasonic rhinoplasty instruments play a crucial role in these techniques to precisely control the mandatory septum resection required to lower the cartilaginous or osteocartilaginous vault. They also allow for gentle and controlled harvesting of nasal septum tissue or correction of any type of septal deviation while preserving septal stability.





Before

4 months later

This patient complained of a nose that was too long, too masculine, with a moderate hump more pronounced on the left side.

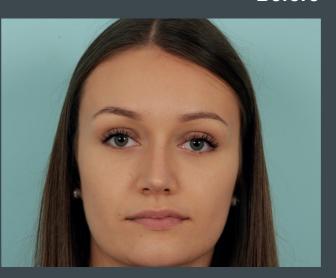
She underwent an open rhinoplastic rhinoplasty combined with a preservation technique.



Before



6 days later



4 months later

The result at 6 days shows moderate swelling and minimal bruising.

The result at 4 months shows the natural correction of the hump and the desired overall refinement of the nose.

Primary rhinoplasty

Feminization of the nose

Dr. Amanda Fanous is a facial plastic surgeon based in Montreal, Canada. Her practice focuses mainly on rhinoplasty (both aesthetic and functional) and facial rejuvenation. She also has a particular expertise in otoplasty.

She completed both her medical school and Otolaryngology-Head and Neck surgery residency at McGill University. She then spent her fellowship in Paris, France, learning from experts in the field including Dr. Olivier Gerbault and Dr. Françoise Firmin.

I truly believe that ultrasonic technology has revolutionized the world of rhinoplasty. For the first time in history, rhinoplasty surgeons are now armed with a tool that allows them to not only precisely perform all osteotomies, but to also sculpt the actual bony surfaces (osteoplasty).

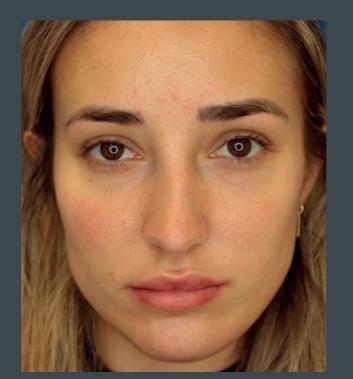
Furthermore, given that the piezotome does not breach the inner periosteum, the work has the added advantage of being done under direct visualization for extra precision without fear of bony collapse. The applications are wide: deviated bony pyramids, wide bony vaults, brittle bones in older patients, etc... I could not imagine my practice today without it.

Thank you Dr. Olivier Gerbault for pioneering this technique and thank you ACTEON medical for engineering the perfect tool.

I truly believe that ultrasonic technology has revolutionized the world of rhinoplasty.

Dr. Amanda Fanous, Canada





Rhinoplasty



This is a 25 year old woman who presented requesting a primary rhinoplasty to feminize her nose. She is a model and felt that her nose was too imposing for her otherwise delicate facial features.

She had a large dorsal hump, a deviated and asymmetric bony pyramid, a concurrent septal deviation and a droopy slightly bulbous tip.



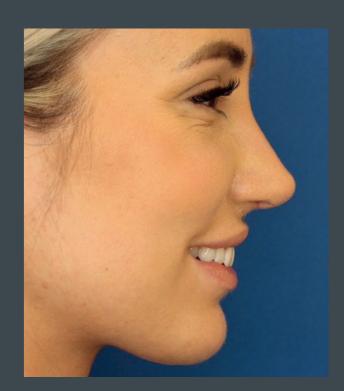
3 months later

The ACTEON medical Piezotome® M+ was used to precisely remove the bony hump and to narrow, straighten and even out her nasal bones.

Furthermore, a complex septal reconstruction as well as tip refining and supporting techniques were undertaken to lift and refine her nasal tip.



Before



3 months later

Rhinoplasty Clinical case 10

Primary rhinoplasty

Structured ultrasonic rhinoplasty with costal graft

After graduating in medicine from the Pontifical Catholic University of Campinas (PUC-Camp), Dr Lessandro Martins did his internship at the Federal University of Uberlândia (UFU).

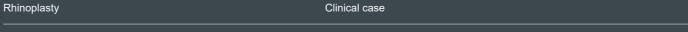
After specializing in otorhinolaryngology, he spent over three months in Bogotá, Colombia, learning from the best nose surgeon at the time, Dr Fernando Pedroza.

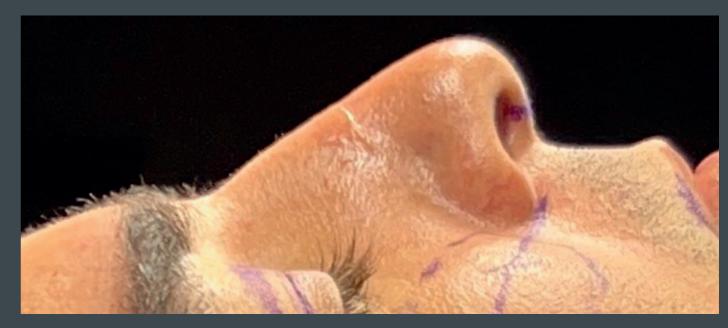
He returned to Brazil and worked for two years at the Federal University of Uberlândia as an assistant professor, putting into practice all the experience he had gained during his years of study.

He also has developed techniques that have attracted doctors from all over the world to come and learn from him.

FISH BONE technique







Before



Just after the surgery

This patient underwent rhinoplasty to correct a dorsal hump, dropy tip and crooked nose

We've applied the Martins' Rhinoplasty concept, which consists of a structured ultrasonic rhinoplasty with costal graft.

In this case we used the double spreader and double septal extension graft for structure, osteoplasty and fish bone osteotomies with piezotome for remodeling and narrowing the bony pyramid and the upper third, sutures for nose tip reshaping.

You can see that the nose is no longer dropped and he has a natural and straight appearing nasal profile and three quarters.





Before

After

M+ rhinoplasty **Tips**

We offer a wide range of tips specially designed for rhinoplasty surgery.

We first launched two kits of short tips aimed for the open approach:

- the "Essential" kit composed of the main tips necessary for an efficient ultrasonic rhinoplasty Ref: F87681
- the "Expert" kit composed of the six tips from the "essential" kit and three additional tips allowing a more thorough and precise surgery.

Ref: F87689





RHS2Hb

Hard rasp

For thick skin or dense bone

Fine remodeling of the nose pyramid. Removal of the bony hump and lateral convexity. Smoothing of bone irregularities. Smoothing of bone and hard cartilaginous graft.

Tip length: 33.7 mm D1 - 60 ml/min - 3*

Ref: F87686



RHS2Fb

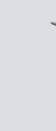
Fine rasp

For thin skin or thin bone

Fine remodeling of the nose pyramid. Removal of the bony hump and lateral convexity. Smoothing of bone irregularities. Smoothing of bone and hard cartilaginous graft.

Tip length: 33.7 mm D1 - 60 ml/min - 3*

Ref: F87687



RHS6

Diamond coated drill

Nasal bone or nasal spine drilling

Septal suture to bone. Bone suture.



osteotomy to the resection.

Tip length: 27 mm D1 - 80 ml/min - 3*

• Ref: F87680



RHS5

Straight thin saw

Median oblique osteotomy

Low osteotomy. Medial oblique osteotomy to connect the transverse external part of the hump Costal bone harvesting.

Tip length: 34 mm D1 - 60 ml/min - 3*

• Ref: F87679





RHS3L/RHS3R

Left and Right angled saws

Lateral and transverse osteotomies

Lateral osteotomies: From the pyriform aperture to the top of the nasofacial groove. Transverse osteotomy.

Tip length: 30 mm D1 - 60 ml/min - 3*

• Ref: F87677 / F87678

"EXPERT"



RHS4L/RHS4R

Left and Right angled saws

Transverse osteotomies

Transverse osteotomy: After the lateral osteotomy to reach the medial part of the bony vault. Costal bone harvesting.



• Ref: F87683 / F87682



RHS1

Scraper

Remove important bone excess

Remodeling of the nose pyramid: Ostectomy of the dorsal hump and lateral convexity.

Tip length: 28 mm D1 - 60 ml/min - 3*

• Ref: F87688





To best support the development of new techniques such as **Preservation Rhinoplasty**, we worked with experts to develop a **new range of long tips**.

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Each tip has been designed specifically to preserve the anatomy and address the different steps of bone treatment in rhinoplasty, from bone rasping to osteotomies with a completely unobstructed and clear view. Any bone convexity or asymmetry can be assessed and treated.

Inspired by practioners, dedicated to their patients.

Rhinoplasty



As rhinoplasty techniques evolve, our range of tips also changes with the introduction of long tips.

All kinds of ultrasonic rhinoplasty surgeries can now be performed thanks to the most complete and wide range of tips from ACTEON medical.





BS6 XXL

Extra long scraper

Remove important bone excess

Remodeling of the nose pyramid: Ostectomy of the dorsal hump and lateral convexity.

Tip length: 103 mm D1 - 80 ml/min - 3*

• Ref: F87604



RHL4L/RHL4R**

Extra long angled saws

Transverse osteotomies

Transverse osteotomies.
Longitudinal osteotomy of the perpendicular blade of the ethmoid.

Tip length: 91.7 mm D1 - 60 ml/min - 3*

• Ref: F87692 / F87691



RHL5**

Long thin saw

Median oblique, cephalic and caudal osteotomies

Medial oblique osteotomy.

Dorsal resection of the bony and cartilaginous septum.

High osteotomy of the perpendicular ethmoidal plate.

Anterior nasal spine osteotomy.

Tip length: 59.6 mm D1 - 60 ml/min - 3*

• Ref: F87684



RHL6**

Extra long rounded saw

Anterior osteotomy

Lateral osteotomies. Codal resection of the bony and cartilaginous septum.

Tip length: 101.4 mm D1 - 80 ml/min - 3*

• Ref: F87693

PROTOCOLS

Open technique

with Rhinoplasty Expert kit



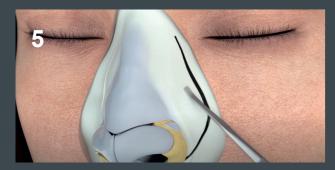
Ostectomy of the dorsal hump and lateral convexity

RHS1



Smoothing of the bones with the fine rasp

■ RHS2Fb



Bone mobility assessment



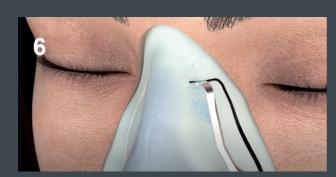
Rasping of the dorsal hump and lateral convexity

- RHS2Hb



Lateral osteotomy from the pyriform aperture to the cephalic part of the naso facial groove

- RHS3R



Transverse osteotomy

- RHS4R



Bone mobility assessment



Median oblique osteotomy if mobility is not achieved

- RHS5



Bone mobility assessment



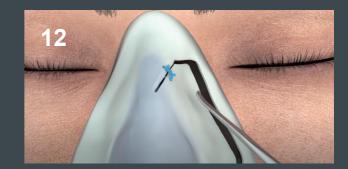
Rasping bones edges

- RHS2Fb



Holes drilled if there is a significant gap between the two sides of the osteotomy line or a lack of bone stability

- RHS6



Final bones positionning

Replicate the complete protocol on the other side.

3D tutorial on our YouTube page





Preservation rhinoplasty High strip Open approach



Abrasion of the bony vault for better skin adhesion

- RHS2Hb



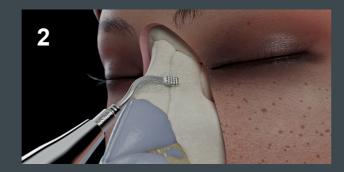
Lateral osteotomy from the pyriform aperture till the highest part of the ascending branch of the maxilla*

■ RHS3R



Transverse osteotomy*

- RHS4R

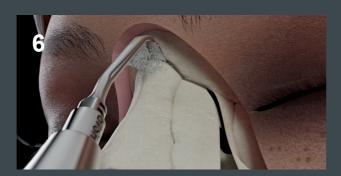


Rasping of the hump and the lateral convexity
- RHS2Hb



Let down option: Controlled ostectomy of the sidewalls removing a wedge of bone*

- RHS5



Radix osteotomy left side*

■ RHS4R



Osteotomy of the perpendicular plate of the ethmoid joining the radix osteotomy

- RHL5

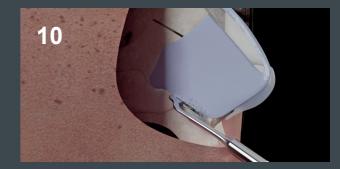


Septal strip trimming continued with a knife



When graft harvesting is necessary for tip support: bone and cartilage septum harvesting

■ RHL5



Continue the bone and cartillage septum harvesting

- RHL6



Continue the bone and cartillage septum harvesting

• RHL4L



Continue the cartilaginous septal trimming with a knife

*Same protocol on the other side of the patient

3D tutorial on our YouTube page





Preservation rhinoplasty Low strip Closed approach



Abrasion of the bony vault for better skin adhesion

- RHL2



Continue till the highest part of the ascending branch of the maxilla*

- RHL6



Radix osteotomy left side*

- RHL4R



Lateral osteotomy from the pyriform aperture*
• RHS5



Transverse osteotomy*

- RHL4R



Dorsal resection of the bony and cartilaginous septum

RHL5 + RHL4L



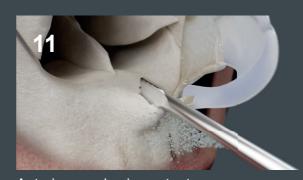
Join the radix osteotomy

- RHL5



Codal resection of the bony and cartilaginous septum

- RHL6



Anterior nasal spine osteotomy

■ RHL5



Suture the septum and pull on the threads to stabilize it



Longitudinal osteotomy of the perpendicular plate of the ethmoid

- RHL4L



Continue the cartilaginous septal trimming with a knife

Lowering of the bone pyramid.



Holes drilled on both sides of the nasal spine

■ RHS6

*Same protocol on the other side of the patient

3D tutorial on our YouTube page



Rhinoplasty Workflow 24 Rhinoplasty Workflow :



About Rhinoplasty workflow

This combination of solutions helps surgeons easily and quickly to have a better diagnosis and to be able to perform safer and minimally invasive rhinoplasty with better outcomes.

It also helps to do a precise follow up and to facilitate the communication with the patient.



Image acquisition & Diagnosis

I need to have a precise diagnosis of the nasal bones structure and density to prepare my rhinoplasty and have the best outcomes possible.

x-mind prime 2



X-Mind® prime with 3D reconstruction makes your image acquisition and diagnosis as easy as possible. High definition imaging combined with exceptional ease of use make it a powerful asset to your diagnosis.



Treatment

I need to make my surgery as efficient and minimally invasive as possible for my patients.





Thanks to Piezotome® solo m+ and the ACTEON® medical tips, you can perform less traumatic rhinoplasties with really precise osteotomies lines and osteoplasties



Follow-up

I need to be able to inspect the intranasal region after the surgery.

ubipack full HD



The Ubipack® Full HD provides great images to ensure the results of your surgery.

The images and films can be shown to the patient and saved to his file.



Piezoelectric surgery is part of the current evolution of 21st century surgery.

Dr. Olivier Gerbault



I truly believe that ultrasonic technology has revolutionized the world of rhinoplasty.

Dr. Amanda Fanous, Canada





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A company of ACTEON® Group

17 Av. Gustave Eiffel, ZI Phare 33700 Mérignac France

acteonmed@acteongroup.com

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