

HISTORY OF ONCOLOGY

Joseph Gensoul's operation for sarcoma of the maxillary antrum, one century before Moore

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Summary

Joseph Gensoul is considered an important figure of the 19th century Lyonnais Medical School. His contribution to maxillofacial surgery and his legendary abilities secured him

a place in the history of Medicine.

Key words: Gensoul, maxillary antrum, maxillofacial surgery, Moore, sarcoma

Introduction

In 1917, the British surgeon Irwin Moore (1866-1953) established the operation for sarcoma of the maxillary antrum, an operation performed through lateral rhinotomy, named after him *Moore's operation* (Photos 1 and 2) [1]. Although lateral rhinotomy, first described by Irwin Moore in 1902, was only popularized as an approach to the maxilla by Doyle in 1968 [2]. The French surgeon Joseph Gensoul (1797-1858) has at least the

right to claim for fame as he was the innovative and pioneer surgeon, who first practised the total resection of the superior maxillary bone using this method [3].

Face surgery and parotid area surgery dated back to the 16th century. The anatomy of the parotid gland and the role of the main ducts were described in the mid-17th century. The earliest references to "para-auricular swellings," as the ancient Greek physicians used to call them, described the findings associated with calculi and inflammation. The initial applications of this area's sur-



Photo 1. The patient before Moore's operation.



Photo 2. The patient after Moore's operation.

gery included an extensive approach, causing serious disfiguration and disability.

In the early 19th century the focus shifted toward dissection and the intimate relationship between facial nerve and the parotid gland. Attempts have been made to perform the operation with nerve preservation [4]. Then Gensoul appeared in the scene and changed the route of face surgery by performing at Lyon's Hôtel Dieu hospital in May 26th 1827 his famous operation. The patient's name was Jean-Marie Véricel [5]. H. Brunet designed two gravures (Figures 1 and 2) that illustrate the Gensoul's method. Gensoul also made improvements in the techniques of rhinoplasty [6].

Gensoul's life and work

Joseph Gensoul (Photo 3) was born in Lyon, France, on January 8, 1797. He obtained his intern exams, the French exam equivalent of the United States medical licensing examination, at the Hôtel Dieu hospital.

At the age of 25, he became the head of the department of surgery at Lyon's Hôtel Dieu hospital creating the greatest department confined to a surgeon in Europe. His lectures were exceedingly attractive and his desire for work became an inspiration for others. His surgi-

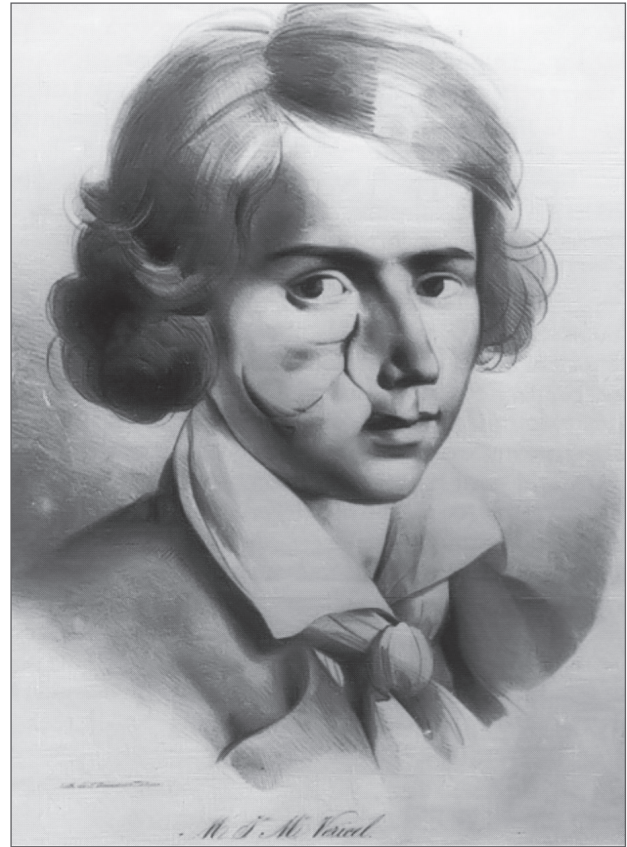


Figure 2. The patient after Gensoul's operation.



Figure 1. The patient before Gensoul's operation.

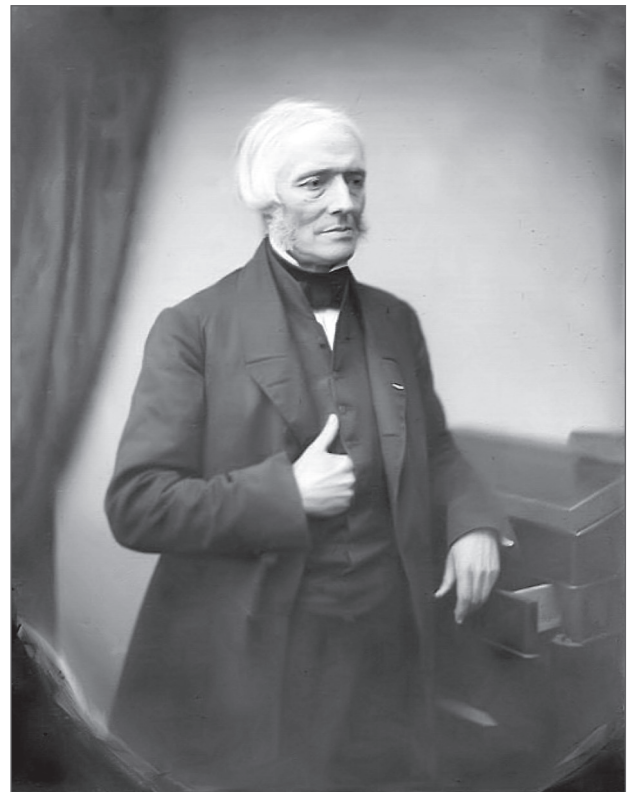


Photo 3. The distinguished French surgeon Joseph Gensoul.

cal procedures for herniotomy, lithotomy, the complete ablation of parotid gland and the removal of the entire half of the lower jaw and the upper jaw were at the time legendary [7]. He was able to remove the jaw and at the same time to perform an aesthetic surgery in less than 3 minutes [8]. He was the first to perform an operation for strabismus on a cadaver and he was an expert in limbs amputations. Among his several publications we distinguish *Sur le mécanisme de la vision* (1851) as one of the most important. Gensoul died in 1858 after a prolonged illness [9].

Gensoul's operation

Jean-Marie Véricel, a 17-year-old silk worker was presented with facial nerve dysfunction, facial asymmetry, eyebrow drop, loss of forehead and nasolabial folds and dropping of the corner of the mouth. The diagnosis was a malignancy of the upper jaw [10]. In Figure 2 (after the operation), we observe a deficit at the site of the mass with sunken appearance, without the same static facial nerve dysfunction. In this Figure the incision does not follow the skin creases and the deficit at the site of the malignancy is not filled.

The incision starts in the preauricular skin crease and if needed it is extended down to the neck along the skin creases. It is very similar to the incision performed nowadays for facelifts for cosmetic reasons. Blair's incision is placed in the preauricular skin crease, then curves around the lobule of the ear over the mastoid process and finally along the upper part of the neck [11]. Lazy S incision follows, which is placed in the preauricular skin crease, with short inframandibular extension. Bailey incision, which is placed in the preauricular skin crease, and below the ear with inframandibular extension, S scheme, was the next step. Then a Y incision, which is placed in the preauricular skin crease, then curves around the lobule of the ear over the mastoid process with inframandibular extension Y scheme [12]. The tragal incision should follow that skin crease [11]. All the incisions are still valid nowadays.

Conclusion

In modern surgery a variety of reconstructive methods included one skin graft, a free forearm flap and a cervicofacial flap [13]. Placement of the high-density polyethylene prosthesis to fill the deficit has excellent functional and aesthetic results [14]. Gensoul was able in less than 3 minutes to perform an acceptable result without having in his armory the knowledge for the use

of flap neither the polyethylene prosthesis. When the American surgeon John C Warren (1778-1856), used ether inhalation anesthesia during the resection of a parotid tumor in Boston in 1846, Gensoul stated: "This is the end of surgery", as he thought that it was the end of virtuosos surgeons [4].

The development of maxillary surgery is connected with the achievements of Joseph Gensoul. Almost a century before Moore, Gensoul removed successfully a facial tumor combined with local maxillectomy [15]. Gensoul's method was not only curative but also aesthetically correct and his incisions are still in use today.

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