



Available online at
ScienceDirect
www.sciencedirect.com

Elsevier Masson France
EM|consulte
www.em-consulte.com/en



Review

Outpatient management in plastic and reconstructive head and neck surgery in France



O. Malard*, G. Michel, F. Espitalier

Service d'ORL et de chirurgie cervico-faciale, centre hospitalier universitaire de Nantes, Hôtel-Dieu, 1, place A. Ricordeau, BP 1005, 44093 Nantes cedex 01, France

ARTICLE INFO

Keywords:

Health system
 Outpatient surgery
 Plastic and reconstructive surgery
 Esthetic surgery

ABSTRACT

The present review lays out the main principles governing outpatient management in the French health system in 2018, and more specifically in plastic and reconstructive head and neck surgery. The historical regulatory aspects and the changes of the last few years are explained, along with the trends and health authorities' expectations for the years to come. The main limitations to implementing outpatient procedures are the common to all surgical specialities, plastic and reconstructive head and neck surgery being no exception. Apart from purely technical aspects concerning surgical procedure and anesthesia, there are issues concerning institutional approval, the organization and continuity of health care, and the patient's environment. The French General Inspectorate of Social Affairs (IGAS), in its 2012 report on the assessment and pricing of hospital care and medical acts, stated that outpatient surgery was becoming standard practice and conventional admission a fall-back, with the aim of meeting the requirement to provide more care without more expenditure. Outpatient plastic and reconstructive head and neck surgery may be available for most patients, but still presupposes certain conditions.

© 2018 Elsevier Masson SAS. All rights reserved.

1. Introduction: the principles underlying outpatient surgery in France

In France, the hospitals reform Act of July 31, 1991 defined outpatient surgery as an alternative to “conventional” hospital admission. In 2004, the authorities set up a system of national health insurance reimbursement with different rates for conventional and outpatient care. Historically, from the hospital's point of view, a system based on pricing by disease-related group (DRG) with a discount for outpatient treatment made full hospital admission more financially attractive. In other words, the temptation was to keep patients in for an extra night. But, in 2012, the lower limits for DRGs with shorter mean hospital stay (less than 2.5 days) were changed. The March 2012 report by IGAS and the General Finance Inspectorate (IGF) on the assessment and pricing of hospital care and medical acts stated that outpatient surgery was becoming standard practice and conventional admission a fall-back, with the aim of meeting the requirement to provide more care without more expenditure. The growth of outpatient surgery should also theoretically reduce wait times and improve access to care for a larger number of patients.

What is at stake, however, is not and should not be merely issues of pricing and economics: medical considerations remain essential. Apart from the usual questions governing type of admission, plastic and reconstructive surgery has certain particularities inherent to management and reimbursement.

Some procedures are reimbursed unconditionally, especially in reconstructive surgery: e.g., most reconstruction flaps in oncology. These procedures have a national health insurance system code which makes reimbursement automatic.

Others are reimbursed only after prior approval by the insurance system: e.g., certain reconstructive or posttraumatic rhinoplasties, which have codes requiring prior agreement from the patient's local national health insurance office.

Other more strictly esthetic procedures are quite simply non-reimbursable: e.g., face lifts, which have codes precluding reimbursement, and are entirely paid for by the patient or his or her private insurance. To the cost of surgery as such are added the costs of admission, of whatever type, which are also borne by the patient. In this context, it is up to the patient (and/or private insurer) to cover all costs, which will depend on the type of admission and the fees of the practitioner, who provides the patient with an estimate.

The outpatient option in plastic and reconstructive surgery is based on the general principles governing type of admission. There is in fact no definitive list of procedures suitable for outpatient implementation, but all prerequisites must be met, including

* Corresponding author.
 E-mail address: omalard@chu-nantes.fr (O. Malard).

approval of the institution, continuity of care and the patient's environment, as well as the actual surgical and anesthesiological procedures as such, which are only one aspect of the preconditions governing type of admission.

A survey of members of the French Society of Reconstructive and Esthetic Facial Surgery (SFCEPF), conducted in 2014, with purely observational assessment of practices, provided an update of the habits of French head and neck surgeons performing reconstructive and esthetic facial surgery. The following presentation is not intended as any kind of guideline, but is rather a simple description of practices. Any outpatient procedure in plastic and reconstructive surgery as in any other surgical field, whatever the technique and type of anesthesia, must adhere to four solid principles, concerning procedure, patient, structure and home relay.

2. Definition and procedures for outpatient surgery in France

By definition, outpatient surgery is limited to 12 hours' admission, excluding the possibility of a night in hospital. Procedures must imperatively have been scheduled and performed in an operating room, under anesthesia of whatever type, with suitable postoperative monitoring. Thus, outpatient surgery by no means implies general anesthesia. On the other hand, local anesthesia may not meet the criteria for outpatient management and does not necessarily mean the patient must be discharged home later in the same day. There must be no obvious risk associated with same-day discharge. This definition rules out surgery performed in the practitioner's office.

The authorities have drawn up no regulations regarding anesthesia protocols and/or surgical procedures that can be implemented on an outpatient basis. Some guidelines have been published by scientific societies in the field of surgery, and by the French Association of Ambulatory Surgery (AFCA). These clearly assert the importance of avoiding a false view of outpatient surgery as concerning "little" procedures: it can also concern complex, long and sometimes technically demanding surgery. The procedure itself is by no means the determining factor in opting for outpatient care: the choice should be patient-centered, in whatever field. Management is above all based on the organization of a structured outpatient surgery unit, enabling same-day discharge whether following ablation of a growth, cataract surgery, treatment of varicose veins or correction of prominent ears.

Regarding the question of which procedures can be performed on an outpatient basis, two levels of management should be distinguished, regardless of speciality:

- the patient;
 - is outpatient treatment suited to the individual patient's environment, in terms of travel, family and psychosocial situation, etc.?
 - can surgical quality and safety be ensured in the individual patient's situation, in terms of general health status, history, autonomy, etc.?
- the health-care structure;
 - outpatient management should improve working conditions for the medical and nursing teams,
 - it should optimize the organization and resources of the surgical technical platforms,
 - and it should reduce costs for the institution and for the health insurance system.

According to the 2014 national report on the prospects for outpatient surgery in France [1], published jointly by the IGF and IGAF, the rate of outpatient surgical procedures, taking all specialties together, rose from 32% in 2007 to 43% in 2013: e.g., a mean rise of 1.7% per year. The increase in surgical admissions over the same period was 9%, which would seem to be mainly due to the 44% rise in outpatient cases. This national dynamic has not been spread evenly across specialties or geographical regions. The French Association of Surgery (AFC) made its latest report on outpatient surgery at the end of September 2017 in its annual congress. There has been definite progress, in that outpatient management now accounts for 46% of procedures in France: almost 1 in 2. But this mean level masks strong geographical disparities: there are 5 percentage points between the most laggardly Regions (Grand Est and Bourgogne Franche Comté) and those in the lead (Pays de la Loire and Provence Alpes Côte d'Azur), although the gap has been significantly narrowed over the last 20 years. The gap between public and private sectors, on the other hand, remains wide; the report notes that the private sector hugely increased its outpatient surgery in the 1990s, and maintains its lead, with a rate of 59%, compared to 40.4% in the public sector. The report estimates that within 2 or 3 years, outpatient surgery should hit more or less ambitious targets of 55% to 63%. Despite encouraging results, the trend is still not quite enough to meet the national objective. A new objective will require new and even greater dynamism than hitherto, with around a 3.3% annual rise between 2016 and 2020. The AFC says that this will be hard to achieve without strong measures of accompaniment by public authorities and/or health-care establishments.

Large-scale surveys in the USA found more than 95% of patients were satisfied with outpatient care—although the American health system and the development of hospital hotels are not easily comparable to the French situation [2].

Extrapolating from this, in the absence of specifically French data, a certain number of limiting factors emerge for outpatient plastic and reconstructive surgery, as independent predictive factors for re-admission [3–5]:

- ASA (American Association of Anesthesiologists) score 3 or 4 is an important unfavorable factor;
- obesity;
- history of severe infection in the months preceding surgery;
- poor management of pain and postoperative vomiting.

The French national health establishment performance support agency, ANAP, highlights the advent of new technologies and connected medicine, enabling teleconsultation and remote management of postoperative effects, facilitating intelligent and effective outpatient care, although it is essential that these new developments should be assessed [6].

3. Outpatient plastic and reconstructive surgery in 2015 in France: an observational survey

As we have seen above, the health authorities' recommendations are of a general order and do not specify what procedures are concerned. A figure of 60% for plastic and reconstructive procedures carried out on an outpatient basis by 2020 in France seems reasonable. Cross-border comparison is not very meaningful, as practices and health systems differ widely between countries; the rate in North America, nevertheless, is nearly 80% [7].

3.1. The figures

A survey conducted in 2014 for a round table of the French Society of ORL (SFORL) included 10 centers (Fig. 1): 6 public and



Fig. 1. Geographical distribution of centers surveyed on their outpatient plastic and reconstructive surgery practice in 2014.

Table 1

Percentage outpatient surgery for the main head and neck plastic surgery procedures.

Type of procedure	%
Otoplasty, children	20.3
Otoplasty, adults	15.3
Rhinoplasty	68.6
Blepharoplasty	15.8
Classic face-lift	10.0
Minilift or other partial face-lift	5
Implants other than cheek or jaw filling, etc.	4.0
Flap reconstruction (dermatologic surgery)	90.3

4 private sector hospitals. It needs to be pointed out that 7 of the 10 had a dedicated outpatient surgery structure. Only 2 had an operative room reserved for day surgery; the other 8 performed plastic and reconstructive procedures in a “single global” room.

Table 1 shows the proportions of the various types of procedure performed. Head and neck defect repair (onco-dermatologic surgery) was the procedure most frequently proposed as day care, with more than 90% of patients eligible. In contrast, face-lifts were,

depending on the technique and the scale of the operation, performed on a day basis in only 5–10% of cases. Equally surprisingly, 20% of child and 15% of adult otoplasties were performed on an outpatient basis. The need for a clinical check-up on the day following surgery may account for these relatively low rates, as hospital hotels have not been developed within the French health system.

The survey also found a rate that was still below the health authority target, at 20–50% of outpatient procedures in the respondent centers. For plastic and reconstructive surgery, the rate was 20–60%. The scatter was very considerable, but the survey did not analyze disparities according to public vs. private sector or geographical region. Outpatient rates in children were consistently lower than in adults, ranging from 5% to 49%.

In strictly accountancy terms, there are no data in France for the profitability of surgical procedures, and notably plastic and reconstructive procedures. The literature mainly reports figures from English-speaking countries identifying the more profitable procedures [6]: peeling and esthetic laser surgery, scar revision, and facial traumatology. The least profitable seems to be breast reduction. Health systems differ widely, and reliable comparison with the French model is unfeasible.

3.2. Qualitative assessment

Several responses shed light on the hindrances practitioners encounter in performing plastic and reconstructive surgery on an outpatient basis [8]:

- the requirement for early follow-up of patients living at a distance, who prefer to spend a night or two in hospital rather than pay for a hotel, so that inpatient rather than outpatient admission is proposed;
- the size of the day hospital structure and lack of beds;
- operative time or a need for associated procedures (e.g., turbinate surgery associated to rhinoplasty);
- inability to respect outpatient management procedures (discharge letters, an immediately available surgical report, etc.).

Regarding perspectives for optimization, the respondent centers highlighted:

- new possibilities and competencies in anesthesia, with growing use of potentiated local anesthesia;
- the possibility of delegating some aspects of postoperative care (e.g., drainage managed by a home nurse);
- improved functioning of medical secretariats (mainly highlighted by public sector centers).

4. Conclusion

Plastic and reconstructive surgery is routinely practiced on an outpatient basis in France. It would seem that short-pathway structures such as the so-called “step forward” system, with admission, stay unit, operative room and discharge home, are being updated in centers that still perform this type of surgery in fewer than 40–50%

of cases. Development needs to continue, to reach the target of 60% of procedures within the next few years.

These theoretical recommendations, however, need to take into account certain specificities, and notably the back-stop role of the public hospital, whether for medical or socioeconomic reasons, which may hinder implementation of outpatient surgery.

Outpatient plastic and reconstructive surgery entails certain preconditions: the patient's ability to ensure postoperative care at home, and the institution's ability to organize the care pathway and home relay. The type of procedure is by no means the only criterion in indications for outpatient surgery.

Disclosure of interest

The authors declare that they have no competing interest.

References

- [1] Bert T. *Journbal officiel de la republique* : JO 2014.
- [2] Chung KC, Hamill JB, Kim HM, Walters MR, Wilkins EG. Predictors of patient satisfaction in an outpatient plastic surgery clinic. *Ann Plast Surg* 1999;42(1):56–60.
- [3] Sieffert MR, Fox JP, Abbott LE, Johnson RM. Obesity is associated with increased health care charges in patients undergoing outpatient plastic surgery. *Plast Reconstr Surg* 2015;135(5):1396–404.
- [4] Mioton LM, Buck DW2nd, Rambachan A, Ver Halen J, Dumanian GA, Kim JY. Predictors of readmission after outpatient plastic surgery. *Plast Reconstr Surg* 2014;133(1):173–80.
- [5] Chasmar LR. A review of 2975 consecutive operations by one surgeon in an accredited outpatient plastic surgicentre: A Canadian experience. *Canadian J Plast Surg* 2005;13(4):188–90.
- [6] Agence nationale d'appui à la performance des établissements de santé et médico-sociaux. http://www.anap.fr/fileadmin/user_upload/L_anap/projets/chirurgie_ambulatoire/CHIR.AMBU.NOTE.D...ORIENTATION.2212.2011.pour.MeLVDEF.pdf.
- [7] Keyes GR, Nahai F, Iverson RE. Evidence-based medicine and data sharing in outpatient plastic surgery. *Clin Plast Surg* 2013;40:453–63.
- [8] Pacella SJ, Comstock MC, Kuzon Jr WM. Facility cost analysis in outpatient plastic surgery: implications for the academic health center. *Plast Reconstr Surg* 2008;121(4):1479–88.