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Day-surgery organization in Sardinia: reappraisal of 5 years of activity

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Abstract

The authors report their personal experience of ambulatory surgery (AS) in a series of patients operated on from 1991 to 1996. The series includes 1118 surgical operations performed as outpatient procedures with immediate discharge. The following types of anesthesia were used: local infiltration (84%), superselective spinal (11%), blended or general (5%). Hernias of the abdominal wall, varicose veins and anorectal diseases were the more frequent pathologies operated on. Results of surgery are satisfactory, reconfirming the advantages of AS such as the absence of complications due to anesthesia and hospital stay, the better relationship between patient and surgeon, and the prompt return to working activities. © 1997 Elsevier Science Ireland Ltd.

Keywords: Ambulatory surgery; Day hospital; Day surgery

1. Introduction

Up to now, day surgery in Italy has not been so widely used as in the majority of the other European countries [1–5]. This is due to the fact that its development has not been at all favored by the main organs of public health (Ministry of Health, regional councils). In spite of the attempts of the Ministry of Health to clarify the situation, day surgery not only is not encouraged but even has improper funding. In fact the current system of refunds to the hospital is based upon payments related to pathology (so called DRG). With this system, the same procedure performed in day surgery is paid 25% less than the corresponding inpatient procedure. In Sardinia, day surgery is reimbursed at the same rate as day hospital care. For example, for a groin hernia operation, the Ministry DRG system pays Lit. 4 211 000 in the case of inpatient procedures, whereas the amount is Lit. 3 158 000 in the case of day surgery. In Sardinia, the corresponding rates are Lit. 3 369 000 and Lit. 583 000, respectively! Hence, what actually is done in the field of day surgery is due solely to the enterprise of hospital surgeons or of private health care operators.

In the field of public healthcare, it is currently possible to carry out only models of hospital-controlled integrated units where a small number of beds are assigned to day surgery and the operating rooms are utilized according to scheduled days. On the contrary, the model of the autonomous unit (freestanding unit of the US experience) [6,7] is widely used in private healthcare.

2. Materials and methods

In January 1991 at the Department of Surgical Sciences and Organ Transplantations, II Division of General Surgery, University of Cagliari, Sardinia, Italy, an integrated day surgery unit became active. This organization has incurred no further economic charges since the work is done with personnel and structures already active: 2-day hospital beds and the operating room for one session a week are utilized.

The work is scheduled according to the following steps:

1. first clinical evaluation; booking; chart with instructions and explanations for the patient; preoperative laboratory examinations and the filling out of anamnestic questionnaire by the patient

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2. anesthetic evaluation and filling out of the clinical chart
3. surgical procedure with a short postoperative check up; controlled discharge
4. follow-up at 1 week.

One surgeon and two residents are in charge of this activity. With the above organization model, we have been able to perform 1118 surgical operations in 5 years for the following diseases: abdominal wall hernias and incisional hernias (40.8%); anorectal diseases (17.4%); varicose veins (17.8%); urologic diseases (6.3%); breast tumours (4%); neck neoplasias (4%); cutaneous and subcutaneous tumours (3.8%); and other operations, i.e. appendectomies, gastrostomies, jejunostomies, rectocele (5.9%). The diseases submitted to ambulatory treatment are listed in Table 1. The patients, whose age ranged from 3 to 92 years, were classified according to the American Society of Anesthesiologists (ASA) classification: 74% of them were in ASA 1, 22% in ASA 2 and 4% in ASA 3, respectively.

Local anesthesia was used in 84%, superselective spinal anesthesia in 11%, and general or blended anesthesia in 5%. Failure to discharge the patient occurred in three cases (0.26%). No hospital admission occurred in the days following surgery. Local infections occurred in seven cases (0.6%) and wound hematomas in 56 (5%).

Table 1
Diseases submitted to ambulatory treatment

Inguinal hernia
Femoral hernia
Umbilical hernia
Epigastric hernia
Incisional hernia
Varicose veins
Hemorrhoids
Anal fissure
Fistula in ano
Pilonidal disease
Condylomata acuminata
Phimosis
Penile tumours
Appendicitis
Urethral polyps
Hydrocele
Spermatic cord cyst
Epididymis cyst
Varicocele
Cryptorchidism
Tumors of the skin and subcutaneous tissue
Breast tumours
Gynecomastia
Thyroglossal cyst
Diseases of the lymph nodes
Tumors of the salivary glands

3. Discussion

Day surgery is a healthcare organization model widely used in western countries. Its particular aims are the improvement of health services and a decrease of economic charges [8–11].

Specific guidelines for the management of such activity do not exist at present and only two organizational models are currently feasible, i.e. (1) hospital-controlled autonomous units, able to employ structures not adequately utilized or unproductive, and (2) hospital-controlled integrated units, that is beds and equipment already part of a department or center.

The first solution seems an attractive one, but it requires such an agreement of politicians and administrators that its fulfilment is difficult to obtain. On the other hand, only the organizing work of a responsible medical doctor is required to obtain the equipment and the personnel for day surgery activity.

Appropriate forms proved quite useful in simplifying the diagnostic–therapeutic program, thus reducing the personnel work load.

In detail, we employ:

- a very exhaustive form with explanations and instructions at the moment of the first examination and booking;
- a medical history chart that the patient has to fill out, date and sign before his anesthetic examination;
- a discharge sheet with clear indications on the problems which may arise in the post-operative course, together with a questionnaire on satisfaction with the procedure and with possible suggestions, to be returned within 3 months.

We believe that adoption of such forms can be very useful together with informed consent to avoid legal problems.

Since day surgery should be no-risk surgery, it should be performed by surgeons with wide experience; in the same way, anesthesiologists should be experienced in those techniques which are of particular importance when dealing with outpatient surgical procedures (new anesthetic drugs, selective peripheral anesthesias, laryngeal masks, etc.).

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