ORIGINAL PAPER

Day-surgery, one-day surgery: the experience of an ENT Unit in a 250 bed Hospital

Esperienza di day-surgery e one-day surgery in un'Unità Operativa di ORL di un Ospedale di medie dimensioni

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Key words

Day-surgery • One-day surgery • Hospitalisation • Patient care

Parole chiave

Day-surgery • Day-surgery con pernottamento • Ricovero • Assistenza al paziente

Summary

The increasing trend in day-surgery procedures, resulting from continuous improvement in medical practice as well as cultural and economic factors, has profoundly changed the management of patient hospitalisation. Improvement in organizational and professional skills of health staff is essential for this procedure which allows mean hospitalisation time to be reduced. A retrospective study on personal experience of day-surgery procedures from 1st January 2002 to 31st December 2004 is herewith presented. The study comprises 1077 patients (74.2%) out of 1452 hospitalisations for programmed surgery in this period. Re-conversion rate of day-surgery hospitalisation reached 0.5%, while re-admissions within one month reached 2.5% and referred to late post-tonsillectomy haemorrhage in all 27 cases. The Authors highlight the importance of communication for an active and responsible involvement of the patients: the human factor is an indispensable quality for the good outcome of the procedure.

Riassunto

La day-surgery è un processo di riconversione della tipologia dei ricoveri che ha subito un incremento negli ultimi anni per fattori, oltre che di natura medica, anche culturali ed economici. Un miglioramento delle capacità organizzative e professionali del personale medico e paramedico ne è la premessa essenziale. Gli Autori presentano uno studio retrospettivo riguardo la loro esperienza di chirurgia programmata in day-surgery nel periodo compreso dall'1 gennaio 2002 al 31 dicembre 2004. I dati riguardano 1077 pazienti che rappresentano il 74,2% dei 1452 ricoveri per chirurgia programmata nel 2002-2004. Il tasso di conversione da ricovero in day-surgery a ricovero ordinario ha interessato lo 0,5% dei casi, la riammissione entro il mese dall'intervento il 2,5% dei casi, cioè 27 pazienti per emorragia tardiva post-tonsillectomia. Una attenta comunicazione con un paziente partecipe in modo consapevole e responsabile è il requisito fondamentale per la buona riuscita della procedura.

Introduction

SIO guidelines for day-surgery [1] highlight a re-conversion process on hospitalisation. In the last few years, in fact, the length of hospitalisation stay for each surgical procedure has progressively been reduced as a result of improvement in medical practice and cultural and economical factors. Day-surgery in our Unit was first used in 2001 and follows the rules 502/1992, 124/1998, 5272/1998 Piedmont, 37/1997, 616-3149/2000 Piedmont [3]. Improving the organizational aspects with agile and effective diagnostic steps has proved essential in reducing the mean hospitalisation time for each type of procedure. The gradual changeover allowed familiarisation with new communication skills and organizational training both for medical and nursing staff. Day-surgery patients benefit from the efficacy of a sympathetic communication with doctors and nurses, and should feel the object of staff attention and protection, both during the short stay in Hospital and once they have returned home. The day-surgery activity requires that all health staff broaden their skills through ad hoc training. Organizational and professional skills are indispensable qualities, with communication evolving around the human factor.

Material and methods

The main aspect concerning re-conversion of our Unit for day-surgery activity is week-end closure of the hospitalisation area; activity in the Unit, therefore, became a 5-day week surgery cycle. Patients needing prolonged hospitalisation are transferred to other Units of the Surgery Department.

Day-surgery hospitalisation is activated according to the following guidelines:

- patient's name is placed on the waiting list, following ENT evaluation. The procedure and level of priority is assessed and recorded together with any examinations requested;
- pre-Hospitalisation (in outpatient area of our Unit): the clinical records are filled out, patient's general state is evaluated, any allergies or pharmaceutical prescriptions are recorded. All routine and requested examinations are carried out. Choice between total and local anaesthesia is made according to the surgical procedure and the patient's preference. Local anaesthesia is generally preferred for corrective nasal septum procedures, turbinate surgery, nasal bone fracture reductions, ossiculoplasty and lymph node biopsies. In the case of general anaesthesia, the patient is seen by the Anaesthesist and is assigned an ASA risk class [4]. Patients will not be eligible for Day-Surgery if they present ASA III risk class. In this case, routine Hospitalisation is chosen as an alternative. Patient signs consensus documents;
- hospitalisation: procedure is carried out;
- dismissal with complete prescriptions and documents. Patients are dismissed with aspiration drainages, when needed (e.g. thyroid surgery, salivary gland and lymph node biopsies) and soft nasal plugs after nasal surgery (septoplasty, turbinate surgery, functionsl endoscopic sinusonasal surgery – FESS);
- nurse calls to see the patient on the evening of dismissal and following morning.

The nurse records any pain, blood loss, bloating in the wound area. If complications are detected, the nurse invites the patient to seek immediate attention at the Unit and informs the doctor available. Patients are checked 48 hours after the procedure for drainage, removal of nasal tampons or medication. The process is carried out entirely within the Unit.

Day surgery patients can refer to the Nurse-in-Charge or to Unit's Doctors for explanations or communications.

Hereby, a retrospective study on all patients who underwent day surgery procedures from 1st January 2002 to 31st December 2004.

Out of 1452 hospitalisations for programmed surgery, 1077 patients (74.2%) underwent day-surgery for a total of 1321 operations. Of those patients, 718 (54%) stayed overnight (Table I).

The intervention procedures performed in day-surgery and the type of anaesthesia used are outlined in Table II.

The intervention procedures performed in day surgery, with or without overnight-stay, are outlined in Table III.

The re-conversion rate of day-surgery hospitalisation in 6 patients reached 0.5% (3 cases of tonsillectomy, 2 cases of septoplasty and 1 nasal biopsy) [2].

Re-admission within one month was necessary in 27 cases, all referring to late post-tonsillectomy haemorrhage. The complication was not related to the type of hospitalisation and did not always require a procedure to stop the bleeding.

In 40% of the cases, cleansing of the area and appropriate observation period was sufficient.

Comment

Efficacy and safety are a priority in day-surgery procedures and are proportional to the competence and professionality of the staff involved. If a day-surgery procedure is characterised by haste, lack of reassurance or a limited doctor-to-patient relationship, it might be perceived by the patient with anxiety and fright. Communication, therefore, becomes an essential factor for success of the procedure and should stimulate the patient's self-confidence inasmuch as he/she is part of a project where he/she is the main character, thus requiring active participation, and responsible involvement. A communication skill training is advisable for all health staff and regular meetings with case-analyses are considered useful to improve interaction between staff and patients. For the patients' safety and reassurance, it is important that a link with the local Health Practitioner be established. Once patients are discharged from a day-surgery procedure, their general practi-

Table I. Hospitalisation for programmed surgery in 2002-2004.

	No.	(%)
Non day-surgery hospitalisation	375	(25.8)
Day-surgery hospitalisation (*)	1077	(74.2)
Total hospitalisations for programmed surgery	1452	(100)

(*) 718 (54%) overnight stay

Table II. Day-surgery procedures and type of anesthesia from January 2002 to December 2004.

Surgical procedure	Total	General anesthesia	%	Local anesthesia	%
Nose and paranasal sinuses					
Septoplasty	263	75	29	188	71
Turbinoplasty	204	23	11	181	89
Polypectomy	31	12	39	19	61
FESS	88	80	91	8	9
Fracture reduction	92	1	1	91	99
Caldwell-Luc	8	8	100	0	0
Plaque/ferulas removal	12	0	0	12	100
Other	9	5	56	4	44
	707	204	29	503	71
Ear					
Myringoplasty	34	29	85	5	15
Ossiculoplasty	5	1	20	4	80
Tympanoplasty	28	28	100	0	0
Tympanic drainage	42	13	31	29	69
Other	17	2	12	15	88
	126	73	58	53	42
Neck					
Lymph node biopsy	13	1	8	12	92
Various neoplasms	21	12	57	9	43
Thyroid lobectomy	1	1	100	0	0
	35	14	40	21	60
Oral cavity					
Tonsillectomy	175	175	100	0	0
Adenotonsillectomy	19	19	100	0	0
Adenoidectomy	30	30	100	0	0
	224	224	100	0	0
Salivary glands					
Submandibular dissection	11	11	100	0	0
Sialoadenectomy	5	5	100	0	0
Parotidectomy	11	11	100	0	0
	27	27	100	0	0
Larynx					
Microlaryngoscopy	135	135	100	0	0
Endoscopic procedures	25	25	100	0	0
Voice prosthesis appl.	19	0	0	19	100
Other	23	9	39	14	61
	202	169	84	33	16
Total	1321	711	54	610	46

tioners should have access to all clinical records (e.g. procedures carried out, complications, reference specialists in Hospital, prescriptions). All bureaucratic and administrative work should, therefore, be completed within a short time, but certainly within the same day as dismissal, in order to allow patients to leave the Hospital with records as complete as possible. In our cases, readmissions were necessary for late haemorrhage in 27 patients operated upon for tonsillectomy, during the 3-year period. Late post-tonsillectomy haemorrhage, however, is not directly related to day-surgery hospitalisation. Also the assessment of the haemorrhagic events by the patient and their relatives, who are well informed of the possibility of haemorrhage, is important.

In fact, some patients take a haemorrhage a few drops of blood in salivary secretion.

Table III. Day-surgery procedures and over-night stay from January 2002 to December 2004.

Interventions	Total	Overnight-stay	%	Without overnight-stay	%
Nose and paranasal sinuses					
Septoplasty	263	81	31	182	69
Turbinoplasty	204	27	13	177	87
Polypectomy	31	12	39	19	61
FESS	88	80	91	8	9
Fracture reduction	92	0	0	92	100
Caldwell-Luc	8	8	100	0	0
Plaque/ferulas removal	12	0	0	12	100
Other	9	5	56	4	44
	707	213	30	494	70
Ear					
Myringoplasty	34	29	85	5	71
Ossiculoplasty	5	1	20	4	80
Tympanoplasty	28	28	100	0	0
Tympanic drainage	42	13	31	29	69
Other	17	2	12	15	88
	126	83	66	43	34
Neck					
Lymph node biopsy	13	1	8	12	92
Various neoplasm	21	12	57	9	43
Thyroid lobectomy	1	1	100	0	0
	35	14	40	21	60
Oral cavity					
Tonsillectomy	175	175	100	0	0
Adenotonsillectomy	19	19	100	0	0
Adenoidectomy	30	30	100	0	0
	224	224	100	0	0
Salivary glands					
Submandibular dissection	11	11	100	0	0
Sialoadenectomy	5	5	100	0	0
Parotidectomy	11	11	100	0	0
	27	27	100	0	0
Larynx					
Microlaryngoscopy	135	132	98	3	2
Endoscopic procedures	25	25	100	0	0
Voice prosthesis appl.	19	0	100	19	100
Other	23	10	57	13	43
	202	167	83	35	17
Total	1321	718	54	603	46

The percentage of readmissions of day-surgery hospitalisations is inversely proportional to the efficacy and success of the procedure which, in our study, is 0.5%.

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