

Ambulatory procedures and 'one-day surgery' in general surgery: analysis of 5-years experience

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Ambulatory surgery is assuming a role of increasing importance in the current health politics of cost containment. At present over 50% of all surgical procedures in the USA are performed on a day-hospital basis [1]. Easier bed availability, larger patient turn over, lower incidence of hospital infections, early post-operative mobilization and decrease in the number of absence days from work are connected to the reduction of costs. Patients with complex health problems can be candidates for this type of surgery. The fundamental pre-requisite for ambulatory surgery is the correct pre-operative evaluation of patients by means of laboratory tests, X-ray and EKG tests specific for the primary disease and an accurate anamnesis (ASA evaluation).

The most common surgical procedures are in the fields of gynaecology, orthopaedics, urology, ophthalmology and oral surgery. In general surgery, phlebology, inguinal and crural herniae, breast surgery and proctology represent the major fields of interest for ambulatory treatment and 'one-day surgery'.

In the last few years even minimally invasive procedures (laparoscopy and thoracoscopy) have been included among the techniques to be considered for such surgery [2]. According to the Swedish Planning Rationalization Institute (SPRI) 'one-day surgery' is described as 'surgery or other treatment of corresponding degree of difficulty which usually demands anaesthesia (local, regional, spinal, lumbar or general) and which includes a postoperative recovery period of 2–5 h before discharge' [3].

In any case, the surgeon must perform the operation skilfully and quickly to make sure that the patient recovers rapidly postoperatively. Elongated operating time due to a lack of familiarity with the surgical procedure on the part of the surgeon jeopardizes the potential results.

The patient's risk factors include age, cardiovascular and respiratory diseases, metabolic diseases, acute infections and debilitation.

Since complications occurring during the first 24–48 h differ from those which arise later on, we are used to subdividing the postoperative course into early and late phases.

More than 50% of early complications are due to haemorrhage. This is generally linked to technical faults by factors depending on the surgeon. Other early complications are vomiting, phlebitis, laryngospasm and drug reactions. Therefore, accurate postoperative and postanesthesiology monitoring is necessary. By adequate patient selection and accurate perioperative observation it should be possible to keep the incidence of major early complications below 1% and a mortality rate of 0% [4].

Complications which occur after 24–48 h are connected to improper treatment of the patient postoperatively and to the development of infections. The latter is more common in the presence of diabetes mellitus, in hepatic or renal disease, in patients taking corticosteroid drugs and in debilitated patients

Our study covers the period from January 1991 to December 1995. Three hundred and thirty-seven patients were treated on an ambulatory or 'one-day surgery' basis: 197 males (58.4%) and 140 females (41.6%). Seventy-six patients (22.6%) 44 males (57.9%) and 32 females (42.1%) were aged 75 years or above with a range of 75–86 years. The remaining 261 patients (77.4%), with a range of 16–74 years, were 153 males (58.6%) and 108 females (41.4%). According to ASA classification 195 patients (57.8%) belonged to group I, 101 (30%) to group II and 41 (12.2%) to group III.

'Tension-free' hernioplasty was performed in 116 (34.4%) cases (30 of them bilateral), 41 patients (12.2%) underwent haemorrhoidectomy, 16 (4.7%) lateral

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sphincterotomy for anal fissure, 17 (5%) surgical treatment of abscesses and anal fistulas, 39 (11.6%) excision of benign breast lumps, 5 (1.5%) quadrantectomy with lymphadenectomy, 18 (5.3%) sapheno-femoral or sapheno-popliteal crossectomy (14 of them with stripping) with ambulatory phlebectomy according to Muller, 18 (5.3%) excision of pilonidal cyst, 12 (3.6%) port-a-cath positioning, 12 (3.6%) laparoscopic cholecystectomy, 9 (2.7%) surgical treatment for phimosis, 21 (6.2%) surgical treatment for varicocele and 13 (3.8%) surgical treatment for hydrocele.

General anaesthesia was used in 16.6% of the cases (56 patients); spinal anaesthesia in 13.1% (44 patients) and local anaesthesia in 70.3% of cases (237 patients). One hundred and eighty-eight (55.8%) patients were discharged within a few h postoperatively, the remaining 149 (44.2%) after a one-night stay. Up to the time of discharge no noteworthy complications were observed. However, fever occurred in 25 (7.4%) patients, pain was treated with common analgesics in 51 (15.1%) and 7 (2.1%) patients vomited. During domiciliary convalescence 11 complications (3.2%) were recorded, requiring a further day-stay in hospital for evaluation and treatment. These were 2 anal posthemorrhoidectomy abscesses, 2 persistent postquadrantectomy lymphorrheas, 5 posthernioplasty seromas and 2 cases of persis-

tent pain in the superior abdominal quadrants after laparoscopic cholecystectomy.

It is certain that apart from economic aspects ambulatory surgery is quality treatment with good outcomes, Cohen and Dillon agreed in 1966 when they asserted that 'the patients' safety is not related to hospitalization or non-hospitalization: it is an attitude and when the selection of patients on the part of the surgeon is seriously performed, with an accurate anaesthetic technique there is no reason why we should expect a number of complications larger than those foreseeable during hospitalization' [5].

References

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