

2) Day Case Surgery - Dr. Hiwa

Introduction

- Day surgery is an increasingly important part of elective surgery
- 50 % of elective surgery in the UK
- 60 % or more in the USA and Canada
- 82 % in Kurdistan
- The impetus for this has been
 1. the high cost of keeping patients in in-patient beds
 2. the reduction in availability of these beds
 3. long surgical waiting lists in publicly funded healthcare systems

Improvements in the following have all promoted the expansion of day surgery.

1. anesthesia
 2. pain control
 3. minimally invasive surgery
 4. changing attitudes to recovery after surgery
- Pts, particularly children, benefit from reduced stays in hospital & a rapid return to their home environment

Definition

- *Day surgery is defined as planned investigations or procedures on patients who are admitted and discharged home on the day of their surgery but require some facilities and time for recovery.*
- In most countries, this means that the patient spends a few hours in hospital and does not stay overnight.
- Includes patients who may spend up to 23 hours in hospital, allowing a greater range of procedures to be included.

The benefits and caveats of day case surgery

1. Financial
2. Better use of resources
3. Reduction in waiting lists
4. Decreased hazards of inpatient;
 - a. Hospital-acquired infections
 - b. Thromboembolism and pulmonary complications are reduced.
 - c. For children in particular, day surgery is the ideal option

Postoperative morbidity after day surgery

- Day surgery has an excellent safety record.
- Major morbidity with the potential for serious harm is rare.
- In a large study from the Mayo Clinic in 1993, Warner reported that the mortality and major morbidity in the 30 days after day surgery was 0.0007 per cent — lower than in the general population who had not had surgery.
- Minor morbidity, however, is common.
- Postoperative morbidity is related to:
 1. the type of anesthesia used
 2. the surgery itself
- The procedure is generally the most important predictor of complications.

The essentials of good day surgery

The following are essential:

1. selection of appropriate procedures and patients
2. preadmission assessment and information; anesthesia and surgery with minimal morbidity and complications
3. postoperative and post-discharge analgesia
4. discharge criteria and postoperative instructions
5. follow-up and audit

Day surgery selection

- In selecting suitable procedures and patients, consider:
 - the procedure to be undertaken
 - the social circumstances
 - the fitness of the patient

Criteria for suitable day-case procedures

- Minimal physiological trespass
- Not associated with excessive blood loss or fluid shifts
- Very low risk of serious postoperative complications (e.g. bleeding or airway obstruction)
- Duration of up to 1 hour, 2 hours maximum
- Pain must be controllable with oral analgesics after discharge
- The patient should be reasonably ambulant afterwards

The social circumstances

1. Day surgery needs ready access to a hospital or GP after discharge
2. A responsible adult to escort the patient home and care for them at least until the following morning is mandatory.
3. Patients must have reasonable home circumstances with good toilet facilities, few stairs to climb and access to a telephone.
4. Patients should live within 60 minutes' travelling distance, both to reduce discomfort on the way home and to have ready access to hospital care if needed. Patients should not travel home by public transport.
- *Developing countries with long distances and difficult traveling conditions to reach medical care may find that these are obstacles to introducing day surgery.*

The fitness of the patient for general anesthesia

The patient should be medically stable & have been screened before admission to exclude major health problems.

1. The American Society of Anesthesiologists (ASA)
2. *Age*: 70 is often taken as an upper age limit. The lower age limit depends on the facilities available, the experience of the staff and the procedures undertaken.
3. *Obesity*: Weight limits expressed as body mass index (BMI) are often imposed, Surgery and anaesthesia are undoubtedly more difficult and have more complications in overweight patients, who may also have more health problems. Although a BMI of 30 is often taken as an upper limit, in otherwise fit patients problems do not really become apparent until the BMI exceeds 35.
4. *Respiratory disease.*
5. *Hypertension.*

6. *Cardiac disease.* Unsuitable conditions include
 - cardiac failure
 - symptomatic valvular disease
 - severe or rest angina
 - fast ventricular arrhythmias
 - un paced second or third degree heart block
 - myocardial infarction within the previous 6 months
7. *Diabetes:* Well controlled noninsulin-dependent diabetes (NIDDM) usually poses no problems.
8. *Drug therapy:* anticoagulants, systemic steroids, digoxin, drugs for dysrrhythmias and angina, and monamine oxidase inhibitors need individual anaesthetic evaluation before booking for day surgery. Oestrogen containing oral contraceptives need not be discontinued except for lower limb operations, particularly where a tourniquet will be used.

Post OP

1. *Analgesia:* Good pain control is essential. It is a major reason for delay in discharge.
2. *Early patient mobilization* shortens return to normal function.

Criteria of discharge

1. Stable vital signs
2. Up to mild pain & nausea
3. Could move alone and walk
4. Could dress him self
5. Not needs parenteral drugs
6. There are some one to take care of him at home
7. Not far more than 60 minutes' drive
8. Could take orally