

Day case surgery

One of the most dramatic transformations in health care delivery during the past two decades has been a shift from inpatient surgery to day case surgery (also called ambulatory surgery) (**Ackerman, M.S. ,2002**). The concept of purpose-designed day surgery units has come a long way since it was proposed nearly a hundred years ago by James Nicoll (**Sener, et al. , 2005**).

Advances in anaesthetic and surgical techniques along with increasing health costs have resulted in an ever increasing number of surgical procedures being performed on a day-case basis (**Sener, et al. , 2005**).

Day case surgery can offer a number of advantages for patients, health providers, and even hospitals. Many patients, especially children and the elderly, prefer to have their surgical procedures performed as outpatients because it decreases the separation from their familiar home environment (**Conlay, L.A. , 2005**).

Outpatient surgery may be performed very safely with a low incidence of both minor and major morbidity. Studies have shown that unanticipated admission to the hospital occurs in only 3% of patients following ambulatory surgical procedures (**Warner, et al. ,1993**), (**Twersky, et al. , 1997**).

Benefits of Day Case Surgery

There are many benefits for patient, doctors and hospitals. The commonest are: (**Conlay, L.A. , 2005**)

- Patient preference, especially children and elderly.
- Lack of dependence on availability of hospital beds.

- Greater flexibility in scheduling operations.
- Low morbidity and mortality.
- Lower incidence of infection.
- Lower incidence of respiratory complications. Higher number of patients (greater efficiency). Shorter waiting lists.
- Lower overall procedural costs.
- Less preoperative testing and post-operative medications.

The selection of suitable patients for suitable operations is the basis for good day surgical practice. However, the definition of "suitable" is not based on clinical evidence but rather on excluding major surgery and less fit patients, so eliminating risks and complications (**Millar,J.M. , 2000**).

Characteristics of Appropriate Day Case Procedures

There are some characteristics should be fulfilled in the procedure to enter under the name day case surgery procedure which are (**Millar,J.M. , 2000**):

1. Minimal prolonged physiological trespass.
2. Not associated with excessive blood loss or fluid shifts
Predictability of a stable post-operative course.
3. Minimal or no risk of serious post-operative complications, e.g.; bleeding, thrombosis, airway obstruction, ileus, electrolyte abnormalities, seizures, and diminished level of consciousness.
Early post-operative oral intake.
4. Pain controllable with oral/rectal analgesics after discharge. Early post-operative ambulation.
5. Predictable ability to discharge patient safely.
6. Appropriate staffing, equipment, and back-up for the procedure.

7. Duration of 1-2 hours maximum.
8. No need for surgical drains or urinary catheters.

Procedures Accepted As Day Case Surgery:

The Audit Commission's Day Surgery Report in 1990 suggested a "basket" of common procedures that were considered suitable for day surgery. While these are still valid, the extended use of minimally invasive techniques has increased the number of potential procedures and expanded "trolley" of procedures has been proposed by the British Association of Day Surgery (Cahill, C.J. , 1999).

The British Association of Day Surgery's "trolley" of procedures, 1999:

General surgery:

- Groin/abdominal hernia repair (inguinal, femoral, umbilical, epigastric).
- Excision of breast lump.
- Minor anal surgery.
- Varicose vein surgery.
- Pilonidal sinus excision and closure.

Urogenital surgery:

- Transurethral resection/diathermy/laser of the bladder tumours.
- Circumcision (paediatric and adult).
- Hydrocele excision.
- Inguinal surgery in children (Orchidopexy and herniotomy).

Ophthalmology surgery:

- Cataract extraction \pm implant.
- Correction of squint.

E.N. T. surgery:

- Tonsillectomy in children.
- Bat ears.

Plastic surgery:

- Release of Dupuyterris contracture.
- Minor plastic procedures.

Orthopedic surgery:

- Carpal tunnel decompression.
- Aithroscopy.

Gynaecology & Obstetric surgery:

- Laparoscopy \pm sterilization.
- Termination of pregnancy.

The Audit CommiGSION's "basket" has been expanded to widen the range of procedures within the categories. Some other procedures were omitted as they were poor indicators of modern surgery (**Cahill, C.J. , 1999**) , (**Chung, F. , 1999**) .

Other twenty procedures with 50% possibility -to be considered as day case surgery, which are (**Chung, F. , 1999**) , (**Fortier, J. , 1998**):

General surgery:

- Haemorrhoidectomy.
- Partial thyroidectomy.
- Submandibular gland excision.
- Superficial parotidectomy.
- Hallux valgus operations.
- Laparoscopic herniorrhaphy.
- Laparoscopic cholecystectomy.
- Subcutaneous mastectomy.
- Wide excision of breast cancer with axillary clearance.

Urogenital surgery:

- Urethrotomy.
- Bladder neck incision.
- Laser prostatectomy.

Ophthalmology surgery:

- Eye lid surgery.

E.N.T. surgery:

- Rhinoplasty.
- Tympanoplasty.

Orthopedic surgery:

- Arthroscopic menisectomy.
- Arthroscopic shoulder surgery.

Gynaecology:

- Transcervical resection of endometrium.

Dentoalveolar surgery.

Thoracoscopic sympathectomy.