Proctology in day surgery: surgical technique

V. Pezzangora, S. Ramuscello, G. Viola
1st Surgical Department of the Umberto I Hospital, Mestre
Venice, Italy

In 2002 the law number 112 defined in Italy the Elementary Assistance Levels (Livelli Essenziali di Assistenza - L.E.A.), which are the medical procedures provided to all Italian citizens by the National Health System (Servizio Sanitario Nazionale), for free or after payment of a small fee. Each Italian Regional Government has to define for each pathology (as already categorized in Disease Related Groups - D.R.G.) a benchmark, which is the percentage of cases of each pathology which should be treated in Day Surgery. The benchmarks are thresholds that should not be exceeded to avoid fines or other penalties to the hospital.

The procedures that were judged by the Veneto Region to be feasible in Day Surgery include several operations included in the following specialties:

In order to meet the objectives required by Italian law, a Day Surgery Unit must be able to perform as many operations as possible with high quality, high effectiveness, high efficiency, low costs and a low percentage of complications ("zero defect" objective). To get as close as possible to this objective it is necessary to seek the best organisation and the best surgical technique.

Key words: day surgery, procedures, proctology

INTRODUCTION

In the 1st Surgical Department of the Umberto I Hospital (Mestre - Venice) 23,600 operations were performed between 1993 and the 31st of May 2004. 60% of these operations were performed as Day Surgery procedures:

Proctology operations accounted for 26% of the procedures performed in Day Surgery (3,567 cases):

In 2002 the law number 112 defined in Italy the Elementary Assistance Levels (Livelli Essenziali di Assistenza - L.E.A.), which are the medical procedures provided to all Italian citizens by the National Health System (Servizio Sanitario Nazionale), for free or after payment of a small fee. Each Italian Regional Government has to define for each pathology (as already categorized in Disease Related Groups - D.R.G.) a benchmark, which is the percentage of cases of each pathology which should be treated in Day Surgery. The benchmarks are thresholds that should not be exceeded to avoid fines or other penalties to the hospital.

The procedures that were judged by the Veneto Region to be feasible in Day Surgery include several operations included in the following specialties:

In order to meet the objectives required by Italian law, a Day Surgery Unit must be able to perform as many operations as possible with high quality, high effectiveness, high efficiency, low costs and a low percentage of complications ("zero defect" objective).

To get as close as possible to this objective it is necessary to seek the best organisation and the best surgical technique.

The best organisation implies the development of an independent or dedicated Day Surgery Unit within a Surgical Department. The Unit should have dedicated staff, waiting rooms, outpatient clinics, operating theatres and beds, all completely separated from the normal admission ward for inpatients.

The choice of the best operation implies that each surgical technique used in the Day Surgery Unit should be:

• Easy;
• Quick;
• Well accepted by the patients;
• Effective, with good short- and long-term results.

In a Day Surgery Unit, the contact between the surgeon and the patient is much shorter and more "intensive" than in the ordinary admission ward. The information given to the patient must therefore be comprehensive, fair, detailed, simple and extended to relatives. All these elements are required to win patient’s trust and obtain a valid informed consent to surgical treatment.

The extensive use of local anaesthesia requires cooperation by the patient and it is important to work in a relaxed environment. The availability, even in the operating thea-
tre, of music and TV, as well as the use of relaxed, informal conversation with the patient, are often very helpful. The selection of patients should be rigorous and standardised.

In the Mestre Day Surgery Unit the following exclusion criteria are in use:

**Clinical criteria**

- Psychiatric patients.
- Refusal of local anaesthesia.
- ASA 4, sometimes ASA 3 patients.

**Social criteria:**

- Single patients.
- Homeless patients.

**Logistical criteria:**

Patients who live more than 100 Kms away from any hospital.

The quality control, essential to objectively assess the results of surgery, is performed using some indicators to test the organisation of the Day Surgery Unit and the results of the surgical technique adopted. The Deming’s cycle is the method we use to check our results:

In the Day Surgery Unit of the 1st Surgical Department of Umberto I Hospital (Mestre – Venice), the following quality indicators were monitored between 1993 and the 31st of May 2004:

- Quality indicators for Day Surgery organisation:
  - Patients who did not attend / Patients booked.
  - To measure:
    - Patients selection.
    - Perceived quality.
    - Operations cancelled / Operations planned.
    - To measure:
      - Patients selection.
      - Waiting for the operation 1 hour / Operations performed.

To measure:

- Coordination O.T./D.S.
- Quality indicators for surgical technique:
  - Patients transferred to the ward / Operations performed.
  - To measure:
    - Patients selection.
    - Immediate results of surgery.
    - Reoperations / Operations performed.
  - To measure:
    - Immediate results of surgery.
    - Safety of the operations.
    - Readmitted patients / Operations performed.
  - To measure:
    - Results of surgery.
    - Safety of the operations.
    - Patients discharged within 6 hours / Operations performed.
  - To measure:
    - Immediate results of surgery.
    - Patients selection.
    - Phone calls to the call centre / Operations performed.

Grafik 1

**DAY SURGERY AND HOSPITAL ADMISSION**

Grafik 2

**TOTAL NUMBER OF OPERATIONS**

To Measure:

- Patients comfort.
- Information given to patients.

The use of quality indicators in our Day Surgery Unit prompted us to select the following surgical techniques as the best techniques in Day Surgery for proctology:

- Haemorrhoids:
  - Haemorrhoidectomy with radio frequency scalpel (Ligasure).
- Rectocele:
  - Transvaginal mesh repair (Pelvicol).
- Anal fissure:
  - Lateral sphincterotomy.
- Perianal fistula:
  - Fistulotomy or Fistulectomy.
- Pilomidal sinus:
  - Excision with open technique.
TABLE 1

PROCEDURES TO BE FEASIBLE IN DAY SURGERY INCLUDE SEVERAL OPERATIONS INCLUDED IN THE FOLLOWING SPECIALTIES

<table>
<thead>
<tr>
<th>Year 2003</th>
<th>regional benchmark</th>
<th>Mestre day surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proctology</td>
<td>DRG 158 (48%)</td>
<td>83%</td>
</tr>
<tr>
<td>Phlebology</td>
<td>DRG 119 (83%)</td>
<td>100%</td>
</tr>
<tr>
<td>Hernias</td>
<td>DRG 162 (75%)</td>
<td>94.7%</td>
</tr>
<tr>
<td>Dermatosurgery</td>
<td>DRG 270 (80%)</td>
<td>94%</td>
</tr>
<tr>
<td>Breast surgery</td>
<td>DRG 262 (75%)</td>
<td>95%</td>
</tr>
</tbody>
</table>

REFERENCES

17. Davies J, Duffy D, Boyt N, Aghahosseini A, Alexander D, Leveson S. Botulinum toxin (botox) reduces pain after haemorrhoidectomy: result of a double-blind,


