Summary of the 1996/97 Report

(Published November 1998)

Contents:

Sample group

The detailed sample for the 1996/97 Report was those deaths where the patient's final operation before death fell within the following group of surgical procedures:

- gynaecological surgery
- head and neck surgery
- urological surgery
- oesophageal surgery
- spinal surgery
- minimally invasive surgery

Recommendations

It is a surgical skill to recognise when surgery will be too adventurous, ill advised or futile, given the condition of the patient. It is difficult to resist pressure to operate, whether this comes from the patient, relatives or medical colleagues but it must be recognised that surgery cannot solve every problem.

- A fibreoptic intubating laryngoscope should be readily available for use in all surgical hospitals. Several anaesthetists working in a department should be trained for, and competent at, awake fibreoptic intubations.

- The maintenance of an adequate blood pressure through the operative and postoperative period is an essential part of anaesthesia for patients undergoing carotid endarterectomy surgery. This requires invasive blood pressure monitoring and particular care inpatients with poor cardiovascular reserve.

- Laparoscopic abdominal surgery may take place through a small incision but it still requires anaesthesia and the physiological onslaught of a pneumoperitoneum. High risk patients may not be able to tolerate this stress.

- Morbidity/mortality meetings should take place in all anaesthetic departments. Regular review of mortality following operations is an essential part of anaesthetic practice.

- There are many aspects around the care of patients undergoing anaesthesia and surgery for oesophageal disease, which are of major concern. A fundamental re-examination of the arrangements for the care of these patients is urgently required.

- The technique of tracheostomy should be taught to trainee surgeons. The indications for performing this procedure under local or general anaesthesia should also be taught.

- Pharyngeal pouch is a benign condition but appears to have a significant mortality. Surgical subspecialisation for this condition within otolaryngology departments is required.

- More detailed preoperative investigation and assessment may prevent radical spinal surgery, which is unhelpful for individual patients with advanced malignant disease.

- Surgeons need to be clear about the aims of treatment and benefits for the patient when planning surgery for advanced malignancy.

- Patients and their relatives need to recognise the limits of surgery in advanced malignant disease. A decision to operate may not be in the best interests of the patient.

- The hospital postmortem rate of 8% was unacceptably low. The reasons for this low rate need to be examined.

These recommendations have been selected from the report as it is felt that they should receive early implementation. In all cases these recommendations originated from strong views expressed by the groups of advisors. They are therefore based on the opinions of clinicians practising in particular surgical and anaesthetic specialties. As with all NCEPOD recommendations, in the absence of denominator data, they have not been statistically validated.

"Critical examination of current clinical practice can teach us much. It is hoped that this form of qualitative review can help to identify where we need to re-evaluate our clinical practice, replacing long established custom with a fresh approach".
(from the Introduction by Ron Hoile and Stuart Ingram, Principal Clinical Coordinators).

Selected key points by surgical specialty

3.1 Gynaecology

- Surgery for benign disease can have a poor outcome if the age, physical status of the patient and the type of hysterectomy are not taken into account.

- Infection was a significant factor in more deaths than expected.

- There were examples of inadequate investigation, which could have avoided unnecessary or unhelpful surgery particularly in cases of pelvic or abdominal masses.

3.2 Head and neck surgery

(Any procedure in the head and neck region including the base of skull and pharyngeal pouch surgery but excluding intracranial operations).

- Management of the partly obstructed airway should be a carefully planned procedure between senior surgical and anaesthetic staff. This is a clinical situation for which a local protocol could be devised.

- The report includes a five-page section on the obstructed airway in head and neck surgery, including preoperative planning and investigation, experience of the team, the appropriateness of the location, anaesthetic, surgical and postoperative management.
- The advisors were surprised by the deaths from pharyngeal pouch surgery.

- A personal commentary by Mr Adel Resouly (one of the specialty advisors to NCEPOD) recommends sub-specialisation within otolaryngology departments for this type of surgery.
- Intra-arterial pressure monitoring should be routine for carotid endarterectomy, and preoperative blood pressure control needs to be excellent.

  The section entitled *"Anaesthesia for carotid endarterectomy"* reviews 30 deaths following this procedure, and suggests that improvements in care were possible.

3.3 Urology

- Team assessment is required for all elderly patients, particularly when contemplating radical surgery for malignant disease, because of the high incidence of other medical problems.

- A balance has to be maintained between too aggressive surgery and the quality of life when carrying out surgery in the presence of metastases or following previous radiotherapy.

3.4 Oesophageal surgery

- Oesophageal surgery requires teamwork supported by the availability of a full range of treatment modalities and critical care services.

- Centres offering super-specialised services are required for the management of some oesophageal diseases.

- In some cases surgeons showed a lack of insight and a poor knowledge of thoracic surgical anatomy.

This section comments on inappropriate operations, poor decision-making regarding intubation, case selection, inadequate preoperative assessment and preparation, lack of ICU beds and problems with the management of oesophageal varices.

Sub-sections expand on:

- *"Management of patients undergoing oesophagectomy"*
- *"Preoperative assessment of oesophageal malignancy and preparation for oesophageal surgery"*
- *"Proposed facilities for the specialist practice of oesophageal surgery"*
- *"Oesophageal stenting"*

3.5 Spinal surgery

- In benign disease, difficult revisional surgery for conditions such as scoliosis are best referred to centres with experience of this type of procedure and its difficulties.

- For surgery in metastatic disease there need to be some clear, well understood criteria for selection and for justifying the extent of the surgical approach.

One of the specialty advisors to NCEPOD, Mr Timothy Morley FRCS, wrote the personal commentary on *"The management of metastatic spinal tumours"*.

3.6 Minimally invasive surgery

(Includes minimal access general abdominal surgery, endoscopic thoracic and orthopaedic surgery and diagnostic or therapeutic endoscopies).

- Few deaths were related to diagnostic endoscopy but rather to subsequent major surgery.

- These subsequent operations and resections sometimes seemed inappropriate and aggressive.

Review of this sample produced several areas worthy of comment such as misconceptions about fitness for laparoscopy, the need to understand the indications for (and role of) a percutaneous endoscopic gastrostomy, and the management of biliary stones in the elderly.

These issues are addressed in subsections:

- *"Minimally invasive abdominal surgery may not be minimally stressful to the patient"*
  Personal commentary by Dr Ian Baguley FRCA and Dr Anthony Gray FRCA
- *"Percutaneous Endoscopic Gastrostomy"*
- *"Laparoscopic general surgery"*

Key points in pathology

- The overall (hospital and Coroners') postmortem examination rate of 28% was very low.

- There is a need for a set of guidelines and some standardisation in formulating an OPCS cause of death in postoperative death cases.

- Variation in Coronial practice makes it impossible to build a single logical framework for deciding whether a case should be referred to the Coroner.

Miscellaneous topics

- *"Central venous pressure monitoring during anaesthesia and surgery"*
  A personal commentary written by Dr Roop Kishen FRCA, one of the specialty advisors to NCEPOD

- *"Admission on the day of surgery"*
  The anaesthetic advisors reviewed the details of 77 patients who had undergone scheduled or elective surgery and who were admitted on the day of operation. This commentary focuses on preoperative assessment (e.g. medical status, operation and social factors).

- *"Complications associated with postoperative analgesia"*
  Dr Kathy Sherry FRCA, Clinical Coordinator with NCEPOD, reviewed twelve cases with complications.

- *"Non-steroidal anti-inflammatory drugs"*
  Dr Anthony Gray FRCA, Clinical Coordinator with NCEPOD, summarises the comments of the anaesthetic advisors on a review of 178 patients for whom NSAIDs were prescribed for postoperative pain.

- *"Trainee anaesthetists supervising sedation for sick patients"*
  Six cases are highlighted by Dr Anthony Gray. When deciding on the appropriate grade of anaesthetist, the patient's condition should always be considered, together with the type of procedure and the anaesthetic proposed.