

Clinical Audit and Practice Advisory Group (CAPAG) version of NICE Guidelines for Pre-operative Tests on behalf of ENT-UK

Background

In June 2003, NICE produced a 'Guideline for Preoperative Investigations in Patients undergoing Elective Surgery'. These make recommendations to help guide the appropriate use of routine preoperative tests for patients undergoing elective surgery for children (ASA Grade 1) and adults (ASA Grade 1, 2, 3 and 4). The intention was to avoid unnecessary tests in well patients and ensure that vital tests in sick patients were carried out.

Since then the need for this guidance has increased, as it is now almost universal for patients to be admitted on the same day as surgery. Consequently, we rely on an appropriate work-up having been carried out in a pre-admission clinic run by nurses with little medical knowledge.

The 4 factors that were considered to influence which tests should be carried out were 1.Age of the patient, 2.Severity or Grade of the surgery, 3.Anaesthetic or ASA Grade, 4.Co-morbidity such as Cardiovascular, Respiratory and Renal Disease

Tailoring the Tables to ENT

The principle of the NICE recommendations was good, but in their present form was difficult to apply to ENT. The Clinical Audit and Practice Advisory Group of ENT UK has decided to grade the main ENT surgical procedures into Grade 1-4 (see below). These grades were then applied to a simplified set of 35 tables (reduced from over 70!) for the use of ENT-UK members.

The vast majority ENT patients are ASA Grade 1 or 2. The tables are grouped together for ease of reference, so that all ASA Grade 1 adults and children appear on the same page (6 tables).




Serious co-morbidity is more likely to occur with Head and Neck cancer patients who form a special group of 6 tables (grade 4 surgery). The remaining tables have also been grouped depending on co-morbidity - cardiovascular, respiratory or renal, again so that the appropriate table may be found quickly.

This version is primarily to assist our Pre-Admission Clinic nurses when they request investigations.

Definitions

1. Traffic Light Coding

The recommendations are in the form of 'look up tables'. The tables are set out by Grade of Surgery and ASA Grade, and each indicates the appropriate test according to age. The recommendations are colour coded in a similar way to traffic lights: YES, test recommended (green); test may be considered (amber); or NO, test not recommended (red) for whichever the test may be:

	Test not recommended
	Consider this test
	Test recommended

Which is applied to the tables as follows:

ASA Grade 1 Adults for Grade 2 Surgery

Test	Age (years)			
	16 to < 40	40 to < 60	60 to < 80	> 80
Chest X-ray	No	No	No	No
ECG	No			Yes
Full blood count	No		Yes	Yes
Haemostasis	No	No	No	No
Renal function	No	No		
Random glucose	No			
Urine analysis				
Blood gases	No	No	No	No
lung function	No	No	No	No

2. ASA Grading

The American Society of Anaesthesiologists (ASA) grades are a simple scale describing fitness to undergo an anaesthetic. They are already widely used by anaesthetists in the UK. The ASA grades are defined as follows:

Grade 1 – Normal healthy patient

Grade 2 – A patient with mild systemic disease

Grade 3 – A patient with severe systemic disease

Grade 4 – A patient with severe systemic disease that is a constant threat to life

Grade 5 – A moribund patient that is not expected to survive without an operation

Grade 6 – A brain dead patient

3. Surgical Grading

The NICE guideline also classifies elective surgery into 4 Grades: Grade 1 (minor); Grade 2 (intermediate); Grade 3 (major); Grade 4 (major +). We have graded ENT operations to conform to the same principle provided by NICE for general surgery as per table 1 below. Our grading has taken into consideration:

1. The degree of tissue trauma.
2. Risk of surgeon and anaesthetist sharing the airway.
3. The duration of the procedure.

Methodology

The NICE document (www.nice.org.uk/pdf-cg3niceguideline4.pdf.url and http://www.nice.org.uk/pdf/PreopTests_Apps.pdf) is a consensus document as none of the literature addresses the question of the value of pre-operative testing (level V evidence). It represents 'best practice' as agreed by a panel of experts. The tables are structured so that information can be obtained for each patient according to Age, ASA Grade and Surgical Grade. Separate consideration was also given to patients with Cardiovascular Disease, Respiratory Disease and Renal Disease.

Testing for **sickle cell** gene was considered separately. All those from the following ethnic groups: North African, West African, South and Sub-Saharan African and Afro-Caribbean should be tested and consent obtained to do so. In addition it was recommended that consented **pregnancy testing** should be carried out on anyone who says they might be pregnant.

Consent requires that the reasons for doing the recommended tests, what they involve, and why they are being carried out is explained to the patient. They need to understand the significance of a positive test e.g. for diabetes or sickle cell. This process has to be documented in the notes.

Table 1 Surgical Grading and OPCS Code

Grade 1

- D15.1 Insertion of Grommet
- D15.11 Insertion of T-Tube
- D15.2 Suction Clearance of middle ear
- D15.3 Myringotomy/Tympanotomy (exploration of middle ear)
- D28.2 Examination of ear under anaesthetic

Grade 2

- B10.1 Excision Thyroglossal Duct
- C25.3 Dacrocystorhinostomy + insertion of tube
- C25.4 Intranasal DCR + insertion of tube
- D03.3 Pinnaplasty incl. correction of Bat Ears
- D03.4 Meatoplasty of external ear
- D10.2 Modified radical mastoidectomy
- D10.3 Cortical mastoidectomy
- D10.6 Revision mastoidectomy
- D14.4 Combined Approach tympanoplasty
- D14.1 Tympanoplasty/myringoplasty using graft
- D14.2 Tympanoplasty/myringoplasty
- D14.3 Revision tympanoplasty/myringoplasty
- D16.1 Ossiculoplasty
- D16.2 Graft replacement of ossicular chain
- D17.1 Stapedectomy
- D17.2 Revision stapedectomy
- E02.4 Septorhinoplasty using graft
- E02.6 Rhinoplasty
- E03.1 SMR
- E03.6 Septoplasty
- E04.1 SMD
- E08.1 Polypectomy of nose

E14.8 FESS
E20.1 Adenoidectomy
E21.4 UPPP
E23.2 Operations on pharyngeal pouch
E25.9 Pharyngoscopy
E27.6 Examination of pharynx under anaesthetic
E36.8 Microlaryngoscopy
E36.9 Direct laryngoscopy
F34.1 Tonsillectomy
F36.5 Haemostasis of tonsillar bed (postoperative)
F44.4 Excision of submandibular gland
T87.9 Excision/biopsy lymph nodes
T94.1 Excision branchial cyst
T94.2 Closure of branchial fistula
V09.2 Reduction of fractured nose

Grade 3

B08.4 Lobectomy of thyroid gland
F44.1 Total excision of parotid gland
F44.2 Partial excision of parotid gland

Grade 4

T85.1 Block dissection of cervical lymph nodes
Y08.9 Total laryngectomy

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