



Recommended Minimum Facilities for Safe Anaesthetic Practice for Electro-convulsive Therapy (ECT)

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1. INTRODUCTION

This document should be read in conjunction with the document "*Recommended Minimum Facilities for Safe Anaesthetic Practice in Operating Suites*" [T2] issued by the Hong Kong College of Anaesthesiologists (HKCA)

Reference should also be made to the following documents of the HKCA:

"*Guidelines on minimum requirements for an anaesthetic record*" [T6]

"*Guidelines on Monitoring in Anaesthesia*" [P1]

"*Guidelines on Postanaesthetic Recovery Care*" [P3]

"*Guidelines for Transport of the Critically ill*" [P9]

2. PRINCIPLES OF ANAESTHETIC CARE

2.1 Anaesthesia should be administered only by registered medical practitioners¹ with appropriate training in anaesthesia or by trainees supervised according to HKCA document [E1] *Guidelines on Trainee Supervision*.

2.2 The same standard of anaesthetic care should be followed as care provided in main operating suite, such as pre-anaesthetic consultation, consent, surgical safety check, proper documentation, post-anaesthetic care, emergency management and quality assurance activities.

3. STAFFING

In addition to the nursing staff required by the person performing the ECT, there must be:

3.1 A trained assistant available exclusively for the anaesthetic procedure.

3.2 Adequate assistance in handling the patient.

4. EQUIPMENT

4.1 Each hospital must designate:



4.1.1 At least one specialist anaesthesiologist for the planning and proper provision of the anaesthetic services in each location; and to advise on the choice and maintenance of anaesthetic equipment.

4.1.2 One or more staff to organise and supervise the cleaning, servicing and maintenance of anaesthetic equipment.

4.2 There must be a breathing system capable of delivering up to 100% oxygen which is suitable for both controlled and spontaneous ventilation for the anaesthetic procedure (e.g. modern anaesthetic workstation). Where more than one patient is to be treated, this equipment must be duplicated or there must be an inline viral filter.

4.3 There must be adequate oxygen for the whole anaesthetic and recovery period in addition to, as a minimum, a full size E oxygen cylinder of oxygen for emergency use. If anaesthesia is provided frequently in a location, piped oxygen should be installed, or the continued use of such a location should be reviewed.

4.4 A manual, self-inflating resuscitator bag capable of delivering at least 90% oxygen (e.g. Laerdal, Ambu bags) must also be provided.

4.5 Suction apparatus complying with the current relevant international standards and attachments for both pharyngeal and endotracheal suctioning must be available both in the treatment area and where patients are recovered. Provision must also be made for an alternative suction system in the event of power failure.

4.6 In the treatment area, equipment which complies with Section 4.8 of the HKCA document "*Recommended Minimum Facilities for Safe Anaesthetic Practice in Operating Suites*" [T2], as well as suitable "bite-blocks" must be provided.

4.7 Basic monitoring equipment must include:

4.7.1 An oximeter,

4.7.2 An oxygen analyser,

4.7.3 Continuous capnography

4.7.4 Non-invasive blood pressure monitoring

4.7.5 Electrocardiography and

4.7.6 Immediate access to a defibrillator



4.8 Other requirements are:

- 4.8.1 Adequate lighting for general observation and for the detection of cyanosis.
- 4.8.2 Emergency electrical power and lighting.
- 4.8.3 A means to provide 2-way communication with people outside the area in an emergency.
- 4.8.4 A refrigerator for the correct storage of certain drugs.
- 4.8.5 A tilting trolley or bed which must have a firm base, efficient brakes, easy to manoeuvre and have side rails which can be folded down or be easily removed.

5. DRUGS

5.1 In addition to the drugs commonly used in anaesthesia for ECT, drugs necessary for the management of the following conditions which may complicate or co-exist with anaesthesia, must also be available:

- Adrenal dysfunction,
- Anaphylaxis,
- Bronchospasm,
- Cardiac arrest,
- Cardiac arrhythmias,
- Hyperglycaemia,
- Hypoglycemia,
- Hypertension,
- Hypotension,
- Malignant hyperpyrexia,
- Opioid and Benzodiazepine overdose,
- Pulmonary oedema,



Status Epilepticus.

5.2 The hospital or institution should seek the advice of the specialist anaesthesiologist designated in 4.1.1 on the selection of drugs for the above purpose.

5.3 An arrangement ensuring delivery of adequate supplies of dantrolene to the site is acceptable in lieu of storage on site.

5.4 An appropriate protocol must be available for checking and replacement of time-expired or used drugs.

6. CHECKING, CLEANING AND SERVICING EQUIPMENT

All equipment must be checked in accordance with Section 6 of the HKCA Document "*Recommended minimum Facilities for Safe Anaesthetic practice in Operating Suites*"[T2].

7. RECOVERY FACILITIES

Recovery from anaesthesia must take place under appropriate supervision, either in the area in which the treatment has been given, or in an adjacent area in which the equipment and drugs mentioned in Section 4 and 5 above are available.

8. OTHER CONSIDERATIONS

In many of the hospitals it is common that electroconvulsive therapy is administered in facilities which would not be suitable for the continuing management of a serious complication precipitated by anaesthesia.

The foregoing recommendations only allow patients suffering from complications to be resuscitated and/or supported while awaiting transfer to a more suitable environment. There should be agreed contingency plans to enable smooth, effective transfer of patients to be accomplished with minimal delay, and under adequate medical supervision to a critical care facility. (Please refer to HKCA's document [P9] *Guidelines for transport of critically ill*)



9. REFERENCE

- Anaesthetic Services in remote sites Royal College of Anaesthetists 2014
- “Guidance on the provision of services for anaesthetic care in the non-theatre environment” by the Royal College of Anaesthetists 2016
- Statement on Nonoperating Room Anesthetizing Locations ASA 2013

¹ Medical Registration Ordinance (Cap 161): “registered medical practitioner” means a person who is registered, or is deemed to be so registered under the provisions of section 29.