

DEATH ON THE TABLE

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CONTENTS

INTRODUCTION.....	3
MANAGEMENT GUIDELINES	4
Steps to take immediately after the event	4
Subsequent Actions.....	6
The Role of the Anaesthetic Department.....	7
MEDICO-LEGAL ISSUES RELEVANT TO THE ANAESTHETIST	7
Unnatural Death.....	7
Inquests Act 58 of 1959.....	8
Health Professions Act 56 of 1974 (Section 56)	8
Health Professions Amendment Act 29 of 2007 (Section 48).....	8
Birth and Deaths Registration Act 51 of 1992	10
Autopsy.....	11
REFERENCES.....	12

INTRODUCTION

The perioperative death of a patient, regardless of the cause of that death, is an event that we are all likely to encounter during the course of our anaesthetic practice. It is potentially one of the most stressful events we experience as anaesthetists. The aspects potentiating that stress may be different from person to person, even from case to case. For some it may be the **emotional trauma** (feelings of sadness, guilt, regret).

For others it may be the impact on their **professional functioning** (undermines one's confidence, affects relationships with surgical teams, creates reluctance to do similar cases in the future). Some people may struggle with **communication** in such scenarios (breaking bad news to the family, communicating effectively with nursing or surgical teams during high-stress resuscitation). And yet for others, it may be the **medico-legal** aspects that they find stressful (filling out necessary legal documents, patient's notes, arranging post-mortems, fear of future litigation).

Just as there is likely to be considerable variation in the type and amount of stress experienced by different anaesthetists after a 'death on table', there is similarly considerable variation in how we are able to cope with that stress.¹

Not every patient death results in significant emotional trauma or psychological distress for the anaesthetist. Over the years, we have all developed coping mechanisms that enable us to navigate our way through stressful situations. Nevertheless, there are times and circumstances in which even these usual coping mechanism become overwhelmed, and our ability to handle such situations in an efficient, rational and sensitive manner becomes impaired.

This could lead not only to various personal consequences for the anaesthetist, but considerable impact on the patient's family, staff and possible litigation for the hospital if an adverse event such as a death on the table is handled in an unprofessional haphazard manner.²

This talk explores some ways in which we can learn to identify and anticipate those stressors arising from a perioperative death; come up with a plan of action on how to handle the aftermath of such an adverse event, and hopefully minimize the trauma and stress that may be experienced.^{2,3} It also outlines some of the medico-legal aspects and current litigation relevant to the anaesthetist in relation to a perioperative death.

MANAGEMENT GUIDELINES

With an increasing awareness that anaesthetists may be significantly more vulnerable to the psychological and professional consequences of a perioperative death, as well as the increasing risk of litigation following an adverse medical outcome, the Association of Anaesthetists of Great Britain and Ireland (AAGBI) published a document of recommendations in 2005, on how to handle the aftermath of a patient death during anaesthesia.⁴

This document entitled “*Catastrophes in Anaesthetic Practice – dealing with the aftermath*”, was also adapted and recommended by the Australian Society of Anaesthetists (ASA) and serves not only as a guideline for the anaesthetist involved in the adverse event, but also highlights the role of the Anaesthetic Department and hospital in the management of such an event.⁵

While much of the existing data from the UK-, Australian- and Canadian-based studies and their recommendations, could be extrapolated to our trainees, one does need to bare in mind the differences experienced by South African anaesthetic registrars with regard to available resources, staffing, working conditions, patient load, levels of trauma and violence we see, etc, as compared to our colleagues in these first world settings. Hence in practice, not all of these recommendations are necessarily possible or applicable in our setting.

MODIFIED FROM THE GUIDELINES OF THE AAGBI AND THE ASA “Catastrophes in Anaesthetic Practice - Handling the aftermath”^{4,5}

Steps to take immediately after the event

1. Breathe, curse, pray, sit down...take a moment to **regain your composure**
2. *Records*
 - If possible, designate one person during the resuscitation to keep a record of the sequence of events, including personnel involved, times, drugs and fluids used, interventions and procedures performed, and the outcomes
 - After the event, make accurate, detailed notes on the anaesthetic chart of the anaesthetic given and the events as they occurred
 - No alterations should be made to the original notes, if any additions or amendments need to be made, these should be recorded separately, signed, timed and dated
 - Ideally, details of the preoperative discussion with the patient should have been documented – including risks of the anaesthesia and consent for regional techniques.
 - Make a photocopy of the anaesthetic chart, copies of relevant investigations for your personal record, as well as a personal set of notes detailing the event

- “Your personal notes should include every detail of the routine followed for this patient – when the patient was first seen, by whom, what was prescribed, investigations and results, anaesthetic plan - everything you know now, but when asked in 2 years time in the context of a civil case, you will not be able to remember at all! Most of our routines are so automatic that we forget we even did them”³ or we consider it assumed knowledge. From a medico-legal point of view: make no assumptions, and the more detail the better.

3. *Supporting the Anaesthetist*

In the period immediately following the death, aspects that our anaesthetic colleague may need assistance with are:

- Inform the senior registrar / consultant on duty
- Quickly review the case and go over the sequence of events that transpired while still fresh in one’s memory
- Help to complete documents and make appropriate patient notes
- Help from a senior to speak to the patient’s family
- Depending on the circumstances a decision will need to be made together with the anaesthetist involved and the senior whether or not they are fit to complete their slate/call or whether they need to be relieved of their duties

4. *Dealing with the patient*

- Any death occurring whilst under the influence of anaesthesia constitutes a procedure-related death⁶, and will necessitate further investigation and post-mortem
- All lines, tubes, drains and other equipment connected to the patient must be left in place, and a detailed description should be made thereof. If any doubt exists regarding the position of the endotracheal tube, this should be checked and recorded by a second anaesthetist.
- Documentation should be completed as soon as possible to expedite the process and to facilitate transfer of the body to the mortuary

5. *Communicating with the relatives*

- Whenever possible, such news should be communicated to the family in person. You may need to contact the family telephonically, inform them that a serious complication has occurred and ask them to come to the hospital to speak in person. Try to avoid disclosing the news of the death over the telephone.
- Find a quiet, comfortable room to sit down with the family. The initial meeting will involve informing them what has occurred, and answering any of their immediate questions.
- Never speak to the family alone, ideally you and the surgical colleague involved should speak to them together, including a member of the nursing team and an interpreter if necessary.
- Before the meeting, you and the surgeon should decide jointly on what information to disclose. Offering conflicting versions of events creates

mistrust and such miscommunication could be the root of possible litigation.

- If the cause of death is known, then this should be explained in simple terms. If no cause has been determined yet, do not speculate or offer an opinion – rather inform them that the matter is under investigation.
- Be empathetic. Offering an apology does not imply fault.
- The family will likely need time to process the news, don't give too much detailed information initially, but rather schedule a second meeting, if necessary, to answer further questions.
- Inform them of the procedure that will follow regarding a post-mortem and whom they can liaise with to enquire when the body will be released for funeral arrangements

6. *Documentation to Complete*

- A perioperative death in theatre mandates the completion of a GW24/7 form.
- For an unnatural death in the Intensive Care Unit (KEH and IALCH), we complete an "Unnatural death form" and standard discharge summary.
- These forms go through to the Forensic Pathologist. The purpose of these forms is to provide as much detail as possible to assist the Forensic Pathologist and inquest Magistrate in understanding the events that transpired and in making their findings. Upon completion of their investigation, the Forensic Pathologist will issue a Notification of Death form (DHA-1663).

Subsequent Actions

1. *Equipment and drugs*

- If there is any suspicion of malfunctioning equipment in the theatre or drug irregularities, this may warrant further investigation. A decision will need to be made in conjunction with theatre matron whether to take the theatre or individual equipment out of commission until such time that its safety can be verified by medical equipment maintenance personnel, manufacturers or toxicologists.

2. *Debriefing the theatre team*

- Ideally all members of the theatre team (including nursing and technical staff) involved in the case should be debriefed as soon as is possible or convenient after the event. Having a short, even informal discussion together of the events that transpired, in an open honest manner could go a long way in gaining information, feedback, relieving anxiety, blame; and in maintaining the camaraderie of the theatre teams we work with each day.

3. *Communicating with the media*

- Following the intraoperative death of patient, there may be scenarios in which the media may be involved and approach the hospital staff for statements. A nominated hospital representative should be the *only* person liaising with the media and all enquiries should be directed to this person.

The Role of the Anaesthetic Department

- Departments should be prepared to exercise flexibility and a commitment to providing support to the anaesthetist who may be stressed or emotionally traumatized after the event. Aside from the personal wellbeing of the anaesthetists themselves, the guidelines highlight that a “stressed anaesthetist will be more prone to making errors”⁴, which helps neither the department nor the subsequent patients who come under their care.
- In the immediate time period following the event, it may be necessary to arrange for someone to take over the anaesthetist’s duties or complete his/her call should s/he feel unable to do so.
- An informal debriefing following the event is strongly suggested, where necessary a trusted senior colleague should be assigned to mentor and provide support to the anaesthetist for as long as they may need it. This could involve follow-ups with the anaesthetist (formal or informal) in the weeks following the event.
- At a later stage, review of the case in a departmental Morbidity and Mortality meeting may be a useful learning tool.
- Provide retraining, if needed, in a particular skill that the anaesthetist had difficulty with during the case - eg: management of a difficult airway.

MEDICO-LEGAL ISSUES RELEVANT TO THE ANAESTHETIST

South African law stipulates that any death considered **unnatural** must be reported for medico-legal investigation.⁷

Unnatural Death

Apart from Anaesthetic-associated deaths as specified in Section 56 of the **Health Professions Act of 1974**⁸, there is currently no complete legal definition of an unnatural death. Dada and McQuoid-Mason⁹ state that it is generally accepted for a death to be categorized as *unnatural* if it is caused by:

- the application of force, direct or indirect, and its complications (eg: a stab or bullet wound, road accident); or*
- physical factors (eg: heat, cold, radiation) or chemical effects (toxic substances, drugs, venomous snake bites); or*
- where another person by negligent act or omission can be held responsible for it; or (d) any death which is sudden and unexpected, or unexplained.*

Inquests Act 58 of 1959

According to the Inquests Act 58 of 1959, all unnatural deaths are subject to a formal inquest whereby a magistrate is required to ascertain *(a) the identity of the deceased; (b) the likely cause of death; (c) the date of death; and (d) whether the death was brought about by any act or omission involving or amounting to an offence on the part of any person.*¹⁰

An inquest is not a trial and no persons stand accused of a criminal or other unlawful act. However should the inquest find that a doctor was responsible for a person's death by an act or omission that amounts to an offence, the magistrate may refer the inquest finding to the Director of Public Prosecutions for possible criminal action against the doctor⁹ in terms of the **Criminal Procedure Act 51 of 1977**.

Dada and McQuoid-Mason also emphasize that the responsibility of the anaesthetist extends beyond just the anaesthetic in theatre, but includes the care and monitoring of patients in the recovery room as well. Should a patient die during the recovery stage post-operatively as a result of negligence by the doctor, he/she could face charges of culpable homicide.⁹

Health Professions Act 56 of 1974 (Section 56)

Death associated with anaesthesia was previously defined in Section 56 of the **Health Professions Act 56 of 1974** whereby *"The death of a person whilst under the influence of a general anaesthetic or local anaesthetic, or of which the administration of an anaesthetic has been a contributory cause, shall not be deemed to be a death from natural causes"*.⁸ Under the provisions of this act, all Anaesthetic-associated deaths necessitated a post-mortem and formal inquest.

Health Professions Amendment Act 29 of 2007 (Section 48)

In 2007, the HPCSA introduced a revised version of this act: the **Health Professions Amendment Act 29 of 2007** which states that *"The death of a person undergoing or as a result of a procedure of a therapeutic, diagnostic or palliative nature, or of which any aspect of such a procedure has been a contributory cause, shall not be deemed to be a death from natural causes"*.⁶

Madiba et al note that "while the original clause in section 56 of the Health Professions Act made deaths related to anaesthesia reportable, there was no specific provision for the reporting of deaths related to a procedure."⁷ The Amended legislation now addresses this.

An important point to note, is that there is no consideration of the **time frame** between the Anaesthetic/procedure and the death. Many clinicians previously used a so-called "24-hour" rule - a misconception that if a death occurred within 24 hours of the Anaesthetic, it should be reported as unnatural.

Whereas if the death occurred more than 24 hours after anaesthesia, many clinicians felt it could be reported as natural provided that the patient recovered fully from the anaesthetic. According to the legislation, no such time frames exist. If it can be shown that a causal link exists between the anaesthetic/procedure and the death, regardless of the amount of time that passes between the two (a week, a month, a year) the two are regarded as being related, and is therefore deemed unnatural.^{11,12}

While the new legislation does extend the scope of deaths that are statutorily defined as non-natural, the key point to remember is that the practitioner still retains the discretionary power to decide if it is **likely** that a causal association exists between the anaesthetic/procedure and the death (i.e.: if the anaesthetic/procedure resulted directly in the patient's death or if it played a contributory role to the death.) If this is so, then they refer it to Forensic Pathology as a procedure-related death.

Lets looks at a few examples of deaths we may encounter in the ICU or theatre setting that should be classified as unnatural:¹¹

- 1) A patient who dies **on table during** anaesthesia (the cause of death i.e.: whether it is related to the pathology itself, to the surgery or the anaesthesia, is left to be determined by the investigation)
- 2) A patient who hasn't fully recovered from effects of general anaesthesia, develops upper airway obstruction in **recovery room**, has a hypoxic arrest and dies.
- 3) A patient who **aspirates on table**, develops a pneumonia and dies two week later from subsequent complications
- 4) A patient who has a **stroke post CEA** and dies in ICU two weeks post-op
- 5) A patient for **elective cholecystectomy** who develops **wound sepsis**, subsequent **DVT** and dies from a **pulmonary embolism** three weeks after the initial surgery

All of these, in abidance with the new legislation are procedure related deaths.

Another important point to note however, is that classifying a death as unnatural in a case where an anaesthetic was administered or a specific procedure undertaken, does not imply negligence/fault/or wrong doing on the part of the practitioners (anaesthetists/surgeons) managing that patient.

If it can be shown that the basic standard of care was applied to the patient, and that reasonable steps were taken to prevent anticipated complications, the practitioners have no reason to fear the outcome of post-mortem. Practitioners should not falsely classify a death as natural simply to avoid medico-legal investigation.

The advice offered by most legal and forensic specialists is that if there is any doubt as to how to categorize a specific death – then the best recourse would be to **discuss the case with the local Forensic Pathologist**, and once a joint decision has been reached, to clearly document all the steps taken.

Birth and Deaths Registration Act 51 of 1992

This act defines the conditions under which a doctor may or may not issue a **death certificate**. *“Where a medical practitioner is satisfied that the death of any person who was attended before his/her death by the medical practitioner, was due to natural causes, he/she shall issue a prescribed certificate stating the cause of death. A medical practitioner who did not attend the person before his/her death, but examined the corpse after death and was satisfied that it was due to natural causes, may issue a prescribed certificate to that effect. If the medical practitioner is of the opinion that the death was due to other than natural causes, he shall not issue a certificate but must inform a police officer to his/her opinion in this regard”*¹³

In practice, however, the doctor would either complete a ‘Notification of Death’ form **DHA-1663** and tick the box marked **‘unable to certify that the deceased died solely due to natural causes’**, or would complete an Unnatural Death form. The case would then be treated as unnatural and referred to Forensic Pathology for post-mortem and further investigation to determine the cause of death. The Forensic Pathologist would then issue the Notification of Death form DHA-1663.

Kirk¹⁴ notes that *“the fact that a medical practitioner cannot make a definitive diagnosis regarding the cause of death, is no reason for the practitioner automatically to assume the death to be unnatural, unless convinced that it is so. It is possible to state that the deceased to the best of the practitioner’s knowledge and belief died from natural causes, the exact cause being unknown. If however, there is doubt, it is recommended that the death be classified as one that cannot be certified as resulting from natural causes.”*

The original Notification of Death form, BI-1663 has now been replaced by form DHA-1663. The content of the new form is essentially the same, but now comprises a 3-page part A and a one-page part B.

Saayman¹¹ defines some of the terminology we use when completing these forms: *“The **Primary Medical Cause of Death** is the first disease or injury that set in and which ultimately led to the death of the individual (whether directly or by way of late complications). Examples would be a stab wound to the neck (non-natural cause) or atherosclerotic coronary vessel disease (natural cause).*

*The **Mechanism of Death** is the pre-terminal pathophysiological disturbance or complication which actually terminated the life of the individual. Examples would be hypovolaemic shock or sepsis following a stab wound to the neck, or myocardial rupture with tamponade, secondary to myocardial infarction.”*¹¹

Autopsy

The terms “autopsy” and “post-mortem” are used interchangeably and refers to a detailed medical examination of a dead body to determine the cause of death or to study the character and extent of changes produced by the disease.⁹ An autopsy may be carried out under 3 circumstances:

- 1) Autopsy is mandatory for all unnatural deaths according to the Inquests Act 58 of 1959¹⁰ – consent from family is not required.
- 2) An autopsy may be requested by the doctor for academic purposes where death is categorized as natural but the cause is uncertain. This would be done by the anatomical pathologists, not the state forensic pathologists - consent from family is required.
- 3) Autopsy may be requested by the deceased’s family even if categorized as a natural death by the doctor. The autopsy may either be conducted by a private pathologist enlisted by the family, or the family may open a case with the South African Police Services and have the autopsy done by the state pathologist. If the family wishes to do so, a private pathologist enlisted by them may be present at this autopsy.

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