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RCPA
The Royal College of Pathologists of Australasia

Policy

Subject:	**Autopsies and the Use of Tissues Removed from Autopsies**
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PREAMBLE

On 30 July 1993 the College released its "Position Statement on Autopsies". This was prepared by the Forensic and Anatomical Pathology Advisory Committees of the College in response to concerns about the decline in autopsy rates.

In eight pages, including one of references, it addressed:

1. The value and relevance of autopsies to modern medical practice
2. Consent/permission for and the performance of autopsies
3. The major uses of tissues removed at autopsy.

It was sent to Chief Executive Officers of hospitals throughout Australia and published in the Medical Journal of Australia. The Statement underwent detailed scrutiny when questions relating to post mortem examinations and the use, retention and disposal of human tissue emerged as issues of public concern in Australia in the twelve months from October 2000. During this period many of the provisions of the statement proved to be prescient.

At the end of 1998 the College Executive Committee became aware of emerging concerns overseas relating to autopsies and during 1999 commissioned comprehensive reviews of the contemporary position on autopsies and use of human tissues. These were carried out by Helen McKelvie and Stephen Cordner from the Victorian Institute of Forensic Medicine and appeared in two parts. The first, on the autopsy and autopsy tissue was released in September 2000 and the second on tissue from the living in February 2001. These proved to be valuable resources in general but particularly for informing debate at the College workshops on Human Tissue which were held on 19 March and 28 May 2001. The proceedings of these workshops have again added to the body of knowledge and opinion on questions concerning use of human tissue.

When writing the original position paper in 1993 the legal and administrative background was relatively simple and stable. Following the Australian Law Reform Commission Report No. 7 of 1977, most States and Territories of Australia enacted generally uniform Human Tissue Acts (however called). During the past 2 years, however, there has been a great deal of activity in different jurisdictions, generally speaking, to enhance the autonomy of the next of kin in relation to consent/permission for autopsy. The outcomes, however, have been diverse.

In revising this statement it is now necessary to have regard to:

- The report of the Walker Inquiry in NSW[1] and the Government response
- The proposed amendments to the Human Tissue Act in NSW
- The report of the Solicitor-General in South Australia[2] and the Government response
- The report of a Departmental Inquiry in Western Australia
- Proposed amendments to the Human Tissue Act in Queensland
- The Australian Health Ethics Committee report on retained organs[3] and
- The Code of Practice recently developed by a working part of the Health Ministers Advisory Committee (AHMAC)[4].

In December 2001, the College convened a Drafting Committee for this revised Position Statement. The disciplines represented were anatomical pathology and its subdisciplines forensic and paediatric pathology, and general pathology.

This revised document builds on the foundation of the College's 1993 document of the same name. In that document, the College articulated a policy and practice that anticipated most, if not all, of the autopsy related issues that surfaced in the public domain in 2000 and 2001. Over those two years the document withstood close evaluation and was not subject to

criticism by any of the formal enquiries and processes that took place in that period. Notwithstanding that, given the 8 years that have passed, the level of discussion and enquiry that has occurred and the increasing disparity that is becoming evident in the laws governing autopsy and related issues in New Zealand and the different jurisdictions of Australia, it is time to review and re-state the College's position on these matters.

GUIDING PRINCIPLE

"The autopsy is a vital procedure for medical knowledge which may be of benefit to next of kin, the public and the improvement of health care. The procedures for consent for autopsy and the retention, use and disposal of organs and tissues removed at autopsy should occur in a way that recognises the autonomy of the next of kin (or deceased while alive)."

This Guiding Principle should be used by the membership of the College and by the medical profession, and for informing public opinion.

This guiding principle allows us to articulate a new and positive framework for the autopsy, one that challenges the tendency to see the autopsy as an old procedure increasingly constrained by more and onerous regulation. This new framework emphasises the public benefits that flow from autopsy, but recognises that these will continue to flow only if we look after the proper concerns and interests of families.

The considerable public and private benefits of autopsy mean that the community has a right to expect that systems are developed with community input and understanding to ensure that these benefits are being realised and that the autopsy is not meeting only narrowly defined needs.

OBJECTS OF THE STATEMENT

These are:

- To reassert the value and relevance of autopsies to modern medical practice.
- To propose parameters both for gaining consent/permission for an autopsy and the subsequent retention and use of tissues which recognise the autonomy of the next of kin (or deceased while alive).

In reading this statement, it should be appreciated that there are two types of autopsy: the hospital autopsy (including the perinatal autopsy) and the coronial (forensic) autopsy.

This statement broadly applies to both types, but those paragraphs concentrating on the definition (Para 1.1) and the consent/permission for autopsy (Para 2.1, 2.2, 2.3, 2.4, 3.2) relate only to hospital autopsies. Obviously, consent/permission for an autopsy is not a requirement in relation to coronial autopsies, although increasingly, relatives are being given a statutory basis upon which to object to coronial autopsies. Nonetheless, the College believes that Coroners should heed the wishes of next of kin to the greatest extent possible compatible with their obligation to act in the wider public interest.

Significant differences in law and practice may limit the usefulness of parts of this document in some jurisdictions including New Zealand. Accordingly sole reliance should not be placed on this statement and it should always be read in conjunction with legislation and statements governing local conditions.

1. The Value and Relevance of Autopsies in Modern Medical Practice

1.1. Definition and purpose of the autopsy

The Australian Law Reform Commission in its Report No. 7 of 1977 entitled "Human Tissue Transplants" used the following definition[1]:

"An autopsy has been described as a post mortem examination of the body of the deceased for the purpose of scientific interest in determining the cause of death and other information that may be obtained that might aid medical science".

To the extent that this definition means that an autopsy is conducted for knowledge we endorse it. That this knowledge is simply for scientific interest and for the aid of medical science no longer covers the field. Essentially an autopsy is a post mortem examination of the body of the deceased which provides information meeting a wide variety of needs and which provides an opportunity to access human tissue. The value of this is set out below.

1.2. The value of autopsies

1.2.1. Value to families

i. Identification of the pathologies present (and absent) as the basis of providing families with the best possible understanding of why the death occurred.

ii. Identification of diseases with genetic components so that accurate healthcare and reproductive advice can be made available to close family members.

iii. Provision of a factual basis for counselling of relatives, particularly in relation to anxiety that any action or inaction on the relatives' part contributed to the death. (These issues, amongst others, which can be resolved at autopsy, commonly do not surface as problems until some time after death).

iv. Provision of opportunities to act altruistically by donating organs or tissue for transplantation, research and/or education.

[1] (Despite the title of that report, the terms of reference necessitated "consideration of the use of dead bodies and parts of dead bodies for other purposes than transplantation, including anatomical examination, and the performance of hospital post mortem examination", Part 1, Chapter 1, Para 1).

1.2.2. Value to hospitals and clinicians

i. Provision of an accurate cause of death and the characterisation of pathology present are essential components of clinical audit (ie. a process to ensure that illness is being correctly diagnosed and treated).

ii. Contribution to the characterisation of poorly understood diseases and possible adverse events.

iii. Evaluation of new medical therapies and new surgical techniques and procedures.

1.2.3. Value to administration of justice

For medico-legal purposes, including the comparison of objective medical evidence with the apparent circumstances of death and the confirmation or establishment of identity (but see also below). These purposes are fundamental to the proper administration of civil and criminal justice systems where the issues to be decided relate to matters of illness, injury and death.

1.2.4 Value to patients

i. Provision of allograft tissue for transplantation (eg heart valves, corneas, skeletal and related tissue, integument)

1.2.5. Value to public health including medical education

i. Provision of an accurate cause of death and thus the maintenance of accurate mortality statistics upon which government health policy is based.

ii. Investigation of death of vulnerable individuals dying behind closed doors, such as in hospitals or prisons, and therefore contributing to public confidence or otherwise in those institutions.

iii. As an early warning system in issues of public health and safety and therefore contributing to the prevention of disease and accidents.

iv. Contribution to medical and paramedical education.

v. Contribution to medical and paramedical research.

1.3 Declining hospital autopsy rates

1.3.1. Autopsy rates in hospitals, that is the percentage of patients dying in hospital who undergo post mortem examination, had declined substantially at the time the first version of this statement was issued in 1993. At that time there were numerous reports attesting to the fact that causes of death given by clinicians without the benefit of results of an autopsy are subject to substantial rates of error[5,6,7]. This is inherent in the process and implies no criticism of clinicians[8]. In about 10% of hospital deaths, these errors were such that different treatment may have altered the outcome[9].

In general non-coronial hospital autopsy rates of adult deceased continue to remain at a low level in most institutions notwithstanding an increasing emphasis on audit of Quality and Safety in Health Care. In addition, the appearance of further publications since 1993 continues to demonstrate the inadequacy of the clinical record alone in determining the true cause of death.[10,11,12] Contrary to popular opinion, these error rates have not diminished over time with the advent of new investigative technologies.[11,12,13]

At the present time anecdotal evidence suggests that the average non coronial hospital autopsy rate of adult deceased is of the order of to below 10%. However in institutions where there has been a sustained effort by concerned clinicians to obtain consent/permission for autopsy, rates of the order of 30% have been attained. Rates of the order of 30-60% have been obtained in paediatric and perinatal practice. It is of concern that with the adverse publicity in Australia and overseas these best efforts are being vitiated.

1.3.2. It is important to public health for reasonable autopsy rates to be achieved so that hospitals will be able to assess confidently whether they are achieving their aims of the accurate diagnosis and correct management of patients.

1.3.3. The continuing falling rates reflect not only a lack of familiarity with the value of the autopsy, but also a sense of unease about the procedure itself. This was clearly manifest in the course of debate during 2001. While this publicity has drawn the autopsy to public attention to an unprecedented extent, the impact was not entirely adverse. It is important that pathologists and the medical profession as a whole engage in measures to enhance community knowledge of the autopsy and its value. As an element of this the discipline of pathology needs to publicly restate its position in relation to the philosophical and conceptual framework within which autopsies should be performed as articulated in the guiding principle, which has been formally adopted by the College Council.

1.4 The autopsy and bereavement

It can be difficult for families to cope with bereavement and related issues including considering the issues around autopsy. There has been recent recognition that bereavement care in general hospitals is in need of improvement[14,15].
To meet contemporary needs, hospitals and forensic pathology institutions should have adequate facilities and appropriately trained personnel in order to advise, counsel and support bereaved relatives. Many researchers have

identified circumstances surrounding the death as an important risk factor in determining later coping of the bereaved. Particularly, sudden or traumatic circumstances are recognised [16,17,18] . Lack of understanding of normal grief reactions can lead to an increased number of medical practitioner visits with somatic complaints and/or higher usage of prescription and non-prescription drugs[19]. On the other hand many studies have shown that early intervention can lessen and/or shorten the period of psychological distress[20]. Not only would such professional support be of direct and immediate benefit to families, it would also help disentangle issues related to the understanding of and consent/permission for an autopsy from issues relating to grieving. In addition in the right environment, the results of autopsies could generally be expected to assist in the resolution of grief.

1.5 The importance of education and discussion

Both the medical profession and the general community need to be better informed about the value of autopsies.

A well-informed community, we believe, would take the same general view as we do about the issues aired in this statement. We therefore strongly support wide community education and informed discussion about the value and relevance of autopsies to modern medical practice.

Just as it is important to discuss issues relating to organ donation while in health, families should discuss the possibility of an autopsy, so that when asked there is an improved chance that the response given by surviving relatives better reflects the wishes of the deceased.

2. The Autopsy and the Law

One of the regrettable consequences of events during 2001, has been the loss of the considerable degree of national uniformity in the law governing consent for autopsy and related issues.

The promulgation of a National Code of Practice by the Australian Health Ministers Advisory Council[4] and the development of the Guidelines for the Facilities and Operation of Hospital and Forensic Mortuaries[21] together provide some degree of official guidance about ethical and operational standards for autopsies. However, in contrast to the situation existing in 1993 when the first version of this position statement was issued, the legal situation is currently in a state of flux. It is not possible for the College to provide here a statement of the law as it relates to autopsies in the various jurisdictions in Australia or New Zealand which is both comprehensive and accurate.

The legal situation until July 2001 has been summarised in an article by Cordner and McKelvie in November of that year.[22] Up-to-date information can be obtained through the College website (www.rcpa.edu.au) which provides links to the relevant legislation in each of the jurisdictions in which most Fellows work.

3. Ethics– the duty of the Pathologist and others

The ethical challenges around the performance of an autopsy are amongst the most complex in the practice of pathology. Despite the massive development in bioethics generally in the past 25 years which has been focused on clinical issues (essentially about understanding the doctor's duty to his or her patient and the content of that duty) relatively little has been written about the ethics and values which should underpin the performance of an autopsy.

What obviously distinguishes the autopsy from the generality of medical procedures is that the patient is dead, but equivalent questions still need to be asked, namely:

To whom does the pathologist owe a duty?
What is the content of that duty?

3.1. The duty of the pathologist.

In relation to forensic pathology, an attempt to answer this has been made in the WHO document: "Ethical Practice in Laboratory Medicine and Forensic Pathology"[23]:

"The answer to this question can sometimes be confused because the subject of the pathologist's examination is dead. The issues for most other doctors are clearer because there is a living patient. However, there is at least the argument to be made (and it is the instinctive feeling of many forensic pathologists) that a duty is owed to the deceased, or at least the memory or reputation of the deceased, that the true cause and circumstances of the death be revealed. If such a duty is doubted, a stronger case can be made that the forensic pathologist has a duty to the community at large, because of the trust that the community (including the deceased's relatives) has in the integrity of the medical profession generally. On that basis the forensic pathologist has a duty not to collude in wrongly hiding or obscuring the cause and circumstances of the death."

This answer also has some resonance for anatomical pathology.

3.2. What is the content of the pathologist's duty?

The Forensic Pathologist's broad duty is to ensure that the cause and circumstances of the death are revealed. To "collude in wrongly hiding or obscuring" these is a breach of that duty.
As with other pathologists, and indeed health professionals in general, the more specific content of the forensic pathologist's duty is to exercise a reasonable degree of care and skill in his or her work in the production of valid and useful observations and conclusions. In assessing what is a reasonable degree of care and skill, reference can be made to the practice of colleagues of similar training and expertise. However, such practice is sub-standard if it does not produce reliable and valid results. What this means in practical terms requires an understanding of the basic aims of the forensic autopsy. These are:

- "To discover, describe and record all the pathological processes present in the deceased, and where necessary, the identifying characteristics of the deceased.
- With knowledge of the medical history and circumstances of the death, to come to conclusions about the cause and time of death and factors contributing to death and, where necessary, the identity of the deceased.
- In situations where the circumstances of death are unknown or in question, to apply the autopsy findings and conclusions to the reconstruction of those circumstances. This will, on occasion, involve attendance at the scene of death, preferably with the body in situ.
- To record the positive and relevant negative observations and findings in such a way as to enable another forensic pathologist at another time to independently come to his or her own conclusions about the case. As forensic pathology is essentially a visual exercise, this involves a dependence on good quality photography, preferably in colour."[24]

In the non-coronial setting, the duty of the Anatomical Pathologist* is broadly similar namely:

- To discover, describe and record all the pathological processes present in the deceased.
- Having regard to the medical history and circumstances of the death, to come to conclusions about the nature and cause of the pathological processes present and to assess their relative importance in the patient's clinical course and in contributing to death.
- To record the positive and relevant negative observations and findings in such a way as to enable other medical practitioners involved in the patient's care, and other pathologists at other times, to independently come to their own conclusions about the case. This requires a comprehensive and accurate report supplemented by visual records and, as appropriate, the use of additional investigations such as microbiology.
- To present the findings in such away as to assist the clinicians responsible for the patient's care help the next of kin understand the patient's clinical course and death thus helping with their bereavement; to address significant issues in relation to the management of the final illness having particular regard to issues concerning quality and safety in health care; to advance the understanding of the illness of the deceased through education of healthcare staff; and, subject to ethical considerations, to enable the findings to be used for the benefit of the community through biomedical research.

3.3 The obligations of others

"If there are special ethical obligations of pathologists with respect to the autopsy, there are also obligations owed to pathologists by clinicians, the institution and society"[25]. To ensure that the community and family benefit from all the uses to which knowledge derived from an autopsy can be put, "clinicians have a serious obligation to request post mortem examination."[25] This duty has a corresponding right – the right of a next of kin to request an autopsy also. The clinician attendance at the autopsy shows respect for the patient, family and the pathologist and underwrites the importance of the procedure, apart from being an essential form of continuing education. The autopsy's undoubted role in clinical audit, quite apart from all the other contributions that can be made, means that hospitals have a moral obligation to make autopsy services properly available. This includes the funding required to properly equip and staff the service.

"Cultural and religious attitudes about the autopsy vary from the permissive to the restrictive, the forbidden or the obligatory; the pathologist has an obligation to respect the family's or patient's beliefs about the moral or spiritual status of the cadaver. Unless they have religious objection to the autopsy, families should feel an obligation to grant permission."[25] While the College believes this to be the position, it unreservedly accepts the decision of individuals to withhold consent.

4. Ethics relating to the Performance of Autopsies and Retention and Use of Tissue

4.1. General

The public has a right to have confidence in institutions where autopsies are undertaken. There is an expectation that the principles outlined in this statement and other relevant guidelines are observed. Well-established structures and procedures in the Australian healthcare system enable the

* Anatomical Pathologist includes the paediatric/perinatal pathologist and references to the deceased patient should be construed accordingly.

necessary ethical judgements required to fulfil this expectation. The foundation of these structures and procedures is the Institutional Ethics Committee, the make up of which is set out in the NH&MRC's National Statement on Ethical Conduct in Research involving Humans[26]. It is proper that such ethics committees also consider individual applications for human tissue from autopsies for research, as well as monitor the use of such tissue removed for therapeutic, medical and scientific purposes. Annually the Institutional Ethics Committee should produce a report to its parent body (eg. hospital board) to be incorporated as part of that body's annual report. Included in the report should be details of projects for which tissues removed at autopsy have been made available. In this way, the public interest and private rights will be balanced by a committee, which has both the relevant expertise and public representation, and which is accountable.

In the context of hospital practice and healthcare research this role of the Institutional Ethics Committee is well established and increasingly the need for an equivalent arrangement is becoming recognised in respect of forensic autopsy practice. It may be that in some situations a University or Hospital Institutional Ethics Committee with which the Forensic Pathology Service is affiliated could provide oversight. Having regard to some of the special aspects of Forensic Pathology, a separate Institutional Ethics Committee is likely to be preferable for principal Forensic Pathology Institutions. Such a "specific purpose" Forensic Pathology Institutional Ethics Committee would have as one of its major tasks and oversight of the difficult issues involving interaction with next of kin, the Coroner and law-enforcement agencies.

4.1.1. Processes must be transparent and accountable

This will require clear documentation of all aspects of autopsy practice. The standard should be the same that applies for documentation of all other pathology practice activities required for the purpose of laboratory accreditation. Standards to assist with this, and arrangements to audit compliance with them are currently being developed by the National Pathology Accreditation Advisory Council. In addition it will be necessary to demonstrate awareness of and compliance with the regulatory requirements of the jurisdiction which covers the institution in which the autopsies are conducted.

4.1.2. Information to families and any other persons with a bona fide interest in the findings must be provided in a timely, understandable and sensitive fashion. Answers to questions must be open and honest

Effective communication is essential to an effective autopsy policy. This is true from its commencement, with the process of seeking or obtaining permission, to its conclusion with distribution of reports and disposal of any retained organs. Particular attention is necessary for the "time-critical" stages of the process. For example, next of kin must be afforded adequate time to consider granting permission. However, next of kin will need to balance this with the cumulative effects of autolysis may diminish the value of information obtained from the autopsy as time passes.

Pathologists are encouraged to have a leading role in the governance of all aspects of conduct of the autopsy given what is expected from them in the way of accountability, and the likelihood that they will have the most knowledge of all the processes.

4.2. Consent/permission For Non-Coronial Autopsy

4.2.1. The opportunity must be offered and the consent given before proceeding

The principle of offering next of kin the opportunity to consent is of fundamental importance. There are parallels with the events involved in consent for a patient procedure during life but also some important differences.

With a patient procedure consent is generally given by the person upon whom the procedure is to be performed usually directly to the medical practitioner concerned. With an autopsy permission is granted either from a clear record of the wishes of the deceased (uncommonly) or from the next-of-kin (usually) to a person other than the pathologist who is to perform the autopsy. Furthermore consent/permission having been obtained a specific authorisation is required by a third party before the pathologist can proceed.

Because of this complexity pathologists must satisfy themselves that the processes used are adequate and there is full compliance with the requirements.

Some pathologists may wish, and should be encouraged, to take part in offering the opportunity to consent to next of kin.

The process of offering the opportunities to consent must be clearly documented.

4.2.2. Consent/permission should be informed

The consent/permission obtained should be informed. This means that the nature and outcomes of the autopsy have been properly and sensitively explained to meet the needs of the person(s) from whom consent/permission is being sought .

What properly informed means in this context is however something that is difficult to define, but the processes to maximise its attainment can be put in place.

- There should be adequate literature provided to read. A clear verbal description of the process and what it involves should be provided.
- Questions should be invited. Clear answers should be provided to all questions asked.
- There has to be an adequate consent/permission form.
- It should be made clear that consent/permission for the autopsy will constitute agreement not only for the removal and dissection of organs but also the performance of microscopic examination and other pathology tests on tissue samples and body fluids.

A consent/permission form should delineate the types of issues covered in the interview with the next of kin and should be of sufficient clarity and detail to be of value in the event of any subsequent challenges to the validity of the consent/permission process. It must be recognised however that the mere signing of a consent/permission form does not necessarily indicate that the person signing the form is properly informed. It is the content of the interview associated with properly offering the opportunity to consent to or permit autopsy that is important. The opportunity to consider autopsy should be offered in a manner that enables and encourages questions and discussion

by the family. The ultimate disposal of any retained tissue should also be explicitly considered. This is further considered below.

The possibility that unexpected findings may occur should be raised and that these may result in further discussions about tissue retention.

4.3. To whom should consent/permission be given?

Ideally a senior medical officer (which in some circumstances might be a pathologist) is the person to whom consent/permission for the autopsy should be given. Whoever approaches the next of kin for consent/permission should be aware of the deceased's family circumstances, have an adequate understanding of the value attached to autopsies and be aware of the policies of the hospital and the pathology department in relation to autopsies and the retention of tissues.

Somebody else who is experienced in the field, be it a pathologist, a senior clinician, a trained nurse or a hospital social worker needs to be involved with the consent/permission process. This depends entirely on the particular hospital or establishment. An experienced and appropriately trained person will be able to discern, when conducting the interview with the person, how much information that individual wants above and beyond that necessary to form the basis of a proper consent. Training individuals to offer the opportunity to consider autopsy should involve input from pathologists. Even if not primarily involved it is quite proper, even desirable, for a pathologist to discuss the issue with relatives.

4.4. Consent/permission issues affecting the Coronial Autopsy

Where the autopsy is required by the Coroner no formal consent/permission is required from next of kin for the actual autopsy and authorised related activities. Different jurisdictions have processes which, to a varying extent, allow for review of or appeal against a determination by a Coroner that an autopsy be carried out.
The College, however, is strongly of the view that Coroners should develop processes which maximise families' opportunities to consider autopsy and related issues and that to the extent these do not interfere with the Coroners wider public interest obligations, they should be accommodated.
Forensic Pathologists should have clear guidelines agreed in writing with the relevant Coroner covering the retention of tissues in coronial autopsies.

4.5. Uses of Organs and Tissue obtained at Autopsy

The 1993 version of this statement made reference to the various uses to which organs and tissue obtained at autopsy could be put and of the need to obtain permission for such retention from next of kin. Variations from this overseas (especially in the UK) and in Australia led to considerable adverse comment and publicity. In turn a number of formal reports were commissioned both overseas [27,28] and within Australia[1,2].

4.5.1. Different uses to which organs and tissues are put – ethical and legal issues

A clear distinction needs to be made between retention for diagnostic purposes (including autopsy purposes) and retention for other purposes.

4.5.2 Retention for "diagnostic or autopsy purposes"

This is the area in which a clear distinction remains between the non-coronial autopsy and the coronial autopsy as far as the requirements of the law are concerned.

For the non-coronial autopsy retention of any whole organ or substantial part (other than one or more samples for microscopy or other laboratory testing) must have been addressed explicitly and individually in the process of obtaining consent/permission. Failure to do this is now contrary to instructions of the health authorities in all jurisdictions and may become unlawful as a consequence of amendments to the relevant Human Tissue Act (however called).

For coronial autopsies, coronial authority for organ or tissue retention (subject to legislation in some jurisdictions) for this purpose is sufficient in a formal legal sense.

Regardless of these distinctions at law it is the view of the College that in the coronial situation the next of kin should nevertheless receive information about organ retention of the same quality that is provided in the non-coronial situation for the purpose of obtaining consent/permission for retention of organs. It is recognised, however, that in some circumstances it will be proper (in the interests of justice for example) for the coroner to override any objections next of kin might have.

4.5.3 Retention for purposes other than "diagnostic or autopsy purposes"

These are principally for education or research.
For these purposes irrespective of whether the autopsy is non-coronial, explicit consent/permission must be obtained for retention of all organs or substantial parts exceeding those collected as "samples" for diagnostic tests.

As a rule any use of human tissues for a research purpose will need the authorisation of the relevant Institutional Ethics Committee. In most instances it is likely that specific consent will be required for each research project although this may not necessarily be the case if the organ or tissue has been properly donated to a "research tissue bank" with such research purposes in mind. NHMRC Guidelines allow Institutional Ethics Committees to waive requirements for individual patient's consent in some research projects. In practice this is used most commonly in epidemiological studies. In the case of tissue to be obtained prospectively at autopsy, Institutional Ethics Committees are unlikely to waive consent although they may in some situations be willing to do this for work involving archival tissue specimens.

4.5.4 Quality assurance and continuing medical education

Accurate and reliable laboratory results underpin the reports provided by scientists and pathologists to clinicians, and this includes the safety of tissues provided to transplant recipients. Laboratory quality review and control strengthens the ability of pathologists to attest to the accuracy of their results and provides referring clinicians and the community with assurance regarding the safety and reliability of the test results provided to them.

It is standard practice for pathology laboratories, (toxicology/chemistry, histology, microbiology and molecular biology), to use samples that are surplus to the primary testing process for quality assurance activities such as validation of testing platforms and instruments, and for staff training. The use

of part of the sample in these procedures may be considered secondary to the primary testing purpose, but is as necessary a part of arriving at the reliable test result as the specific testing itself. Despite this it will be appropriate for a few quality assurance activities involving particular use of human tissue to involve approval by an institutional ethics committee.

In common with all other medical practitioners, pathologists have an obligation to keep their working knowledge current and to evaluate by audit or other means the professional standard of their practice. In clinical practice it is widely accepted that every contact with a patient should add to the doctor's experience and knowledge and that some documentation of this is an integral part of continuing professional development. To this extent, the practice of medicine is a research and learning oriented exercise. In the performance of an autopsy, consent will often have been given for the removal of small tissue specimens for histology, microbiology, tissue culture, molecular biology and a range of other possible tests. In this context, pathologists must be relied upon to exercise their expertise and use appropriate discretion to determine which tissue samples to retain for the proper investigation or assessment of the death and also to contribute to relevant continuous learning. In doing so, it is proper that they, as far as is reasonably possible:

- take account of general community and specific next of kin concerns about gratuitous or unethical tissue retention and use and so retain the minimum amount of tissue required for the particular purpose;
- have regard to current knowledge and literature in deciding which tissues are required without necessarily being constrained by historical practice.

4.5.5 Disposal of retained Organs and Tissues

In all situations in which organs have been retained for either diagnostic or other purposes the ultimate arrangements for disposal should be addressed by consultation with relevant next of kin or their authorised representative who may be a funeral director. Preferably this should be done at the time agreement is reached with the next of kin about organ retention. Adequate records should be maintained about organs retained, the consultation about retention and subsequent disposal, and the facts of disposal.

This should include those cases where the retention is for the diagnostic purposes of a coronial autopsy. It is the view of the College that disposal of such organs should be in accordance with the wishes of the next of kin.

In the case of non-coronial autopsies there is a policy in some states that any additional funeral costs associated with disposal of retained organs are a charge on the institution that had requested their retention. Pathologists should ascertain the situation in the jurisdiction in which they practice.
In accordance with the guiding principle it is the view of the College that when the next of kin have agreed that retained organs from autopsies should be disposed of by the institution where the autopsy was performed, this should be by a process separate from general procedures for the disposal of contaminated waste.

4.6 Autopsy Policy, Procedure and Practice

The object of this section is not to provide advice on actual detailed technical aspects of autopsy procedure which can be obtained from the literature.[29,30,31,32,33,34,35] There are however a number of issues relating to the provision of an effective autopsy service that require comment in a comprehensive statement from the College.

A recommendation has recently been made by a subcommittee of the Australian Health Ministers Advisory Council that arrangements for the effective conduct of autopsies are best regulated by an accreditation process equivalent to that which applies for laboratory testing[4]. Accordingly Guidelines are currently being prepared by the National Pathology Accreditation Advisory Council and once adopted should be consulted for guidance on policies and procedures to be used by individual institutions.

4.6.1 Who can perform an autopsy?

4.6.1.1 An autopsy is a specialised medical procedure and therefore should only be performed by a pathologist or a medical practitioner in an authorised pathology training program or under the supervision of a pathologist. (This principle is still honoured in the breach in some Australian jurisdictions since first being articulated over 100 years ago.)[36]

4.6.1.2 One special subset of autopsies is Coronial paediatric autopsies. It is recognized that best practice is assured by a combined paediatric and forensic approach to the autopsy in coroners paediatric cases. On occasions this will mean that both sub-disciplines will be involved in particular cases, and that at least there is a shared involvement in the standards and provision of paediatric forensic pathology services.

4.6.2 Support services for the bereaved

There must be adequate resources to ensure that the appropriate support or counselling is available for the people who need it. It is the expectation of the College that bereavement counselling and related autopsy counselling and information provision should be accessible throughout Australia. All public hospitals and Coroners courts are expected to be adequately resourced to provide these services for the bereaved whose friends and or relatives have died in that hospital or jurisdiction.

4.6.3 Information before the autopsy

It must be understood that in all situations the value of any particular autopsy is heavily dependent upon the quantity and quality of information provided to the pathologist. The full medical record should be available to the pathologist prior to the autopsy as well as a summary of the main clinical issues provided by the responsible medical officer.

4.6.4 The autopsy should be performed in a timely fashion

The autopsy should be performed as soon as possible after obtaining consent/permission or authorisation so that there is minimal delay to funeral arrangements. Although there are important exceptions, an autopsy performed within 48 hours of death will not ordinarily delay funeral arrangements. A properly resourced autopsy service should be able to respond to those who for cultural or religious reasons prefer the autopsy to be conducted on the day of the death.

4.6.5 Facilities for the conduct of autopsies

Facilities for the storage of bodies and the conduct of autopsies should be of good quality and have been accredited for those purposes. The facilities

should enable the performance of a complete autopsy and be clean with an operating theatre-like environment. There should be ready access to pathology services such as histopathology, microbiology, haematology/serology and biochemistry. Radiographic and photographic facilities should be able to be called on. Clean, odour free sensitively decorated viewing facilities should be available. Recent standards have been developed for mortuaries[21] and the Australian Mortuary Managers Association has produced a Code of Conduct for Forensic Mortuary Personnel[37] much of which is applicable to hospital mortuary personnel as well.

There should be adequate access nationally to specialised facilities for the conduct of those autopsies in which there is a substantial hazard usually from infectious agents.

4.6.6 Attendance at an autopsy and the availability of results to relatives

The medical officer responsible for the care of the deceased should make every effort to attend the autopsy, particularly in the hospital setting. In any event, the results of the autopsy should be forwarded in a timely fashion so that the medical officer can advise the family of the results. Also there may be circumstances where, with the knowledge of the responsible officer, it will be proper for the pathologists to see relatives. Where diseases having familial/genetic linkages or communicable infectious diseases are identified during the autopsy, the pathologist has the responsibility to take steps to ensure that appropriate medical follow up is offered to family members who may potentially have a predisposition to be affected by such a disease. Increasingly, in the absence of a responsible medical officer, forensic pathology services are developing capacities to provide information and autopsy results to families.[38,39,40,41]

4.6.7 Reconstruction of the body after autopsy

At the completion of the autopsy, the body should be reconstructed expertly and all organs and tissues not being properly retained should be returned to the body. It is accepted that the exigencies of the autopsy and proper reconstitution of the body involves some natural wastage. While it is not possible for a properly reconstituted body to obscure the fact that there has been an autopsy, as a general rule, the facial features at least, and preferably also the hands and feet should be readily viewable by relatives after the autopsy. In paediatric and perinatal autopsies handling by the parents should be possible. This will often require the careful and time consuming attention of skilled technicians.

4.6.8 Complaints about the autopsy

Complaints from relatives about a hospital autopsy should be made in the first instance to the Director of Pathology or Chief Executive Officer of the hospital where the autopsy was performed.

Complaints about a coronial autopsy should be referred to the Director of the relevant Forensic Pathology service or the Coroner.

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