

A Guide to the Post Mortem Examination Procedure

Post Mortem examination: a simple guide

This leaflet explains why you may be being asked to give your consent to a post mortem examination at such a distressing time, and outlines the procedure. Please accept our sympathies for your loss. We appreciate that you may not want to be given a lot of details at the moment, but if you do want more information, this leaflet is accompanied by a more in-depth guide called Information and Help for the Bereaved. Staff are available to answer any questions you may have, and to take you through the consent form.

What is a post mortem?

A post mortem, also known as an autopsy, is an important medical examination that aims to find out more about a person's last illness and the cause of their death. It cannot take place without the agreement of the next-of-kin, unless the coroner is involved. By law the coroner can order a post mortem examination in some circumstances, such as accidental death. The coroner's officer will contact you directly about this if it is necessary.

Why are post mortems carried out?

Post mortem examinations are mainly carried out to find out exactly how or why the person died, particularly when this was unexpected or if there are public health concerns. In addition to establishing the cause of death, post mortem examinations can also be of great value to our understanding of disease. Examining tissue is one of the most important ways in which doctors learn about illness and how to treat it. Tissue from post mortems can be used to train medical students and new doctors, to help experienced doctors continue to learn about new conditions or treatments, or to teach specialist knowledge.

New medical conditions are recognised all the time. If tissue samples have been retained, it is sometimes possible at a later date to diagnose these new conditions in cases in which they were previously undiagnosed, or given a different diagnosis.

With your permission, an organ (or part of an organ) might also be retained for use in medical research or education. If the organ shows a particularly clear example of a specific illness, it may play an important role in the education of medical students, doctors and nurses.

The performing of a post mortem examination should not affect funeral arrangements, unless there are exceptional circumstances.

Donating organs for transplant is handled separately from the post mortem procedure. Please ask if you want to know more.

When do post mortems take place?

The post mortem will be carried out as soon as possible, usually within two to three working days. It may be possible to arrange it within 24 hours if necessary.

Who carries out post mortems?

Post mortem examinations are done by pathologists, who are specially trained doctors, with help from highly qualified medical technicians. The post mortem examination is carried out following strict guidelines laid down by the Royal College of Pathologists. They take place in a special room in the mortuary, under conditions very similar to an operation. The staff are very experienced and are aware of people's needs at this time and treat each deceased person with the dignity and respect, as they would expect for a member of their own family.

From time to time, professionals in training, with a legitimate interest, such as medical students, police and student nurses may view the examination as part of their training. If you have any strong objections to this please inform the staff who will take your consent for the examination.

What is involved?

A full post mortem examination involves examination of each of the main body systems including the brain and all the contents of the chest and abdomen. In order to ensure that the funeral can go ahead as soon as possible, the pathologists will normally include the removal and retention of small tissue samples from all of the major organs, that is the heart, lungs and brain etc., for examination under a microscope. This can reveal diseases which are not immediately obvious. The pieces of tissue removed during the post mortem examination will be treated with a chemical called formalin, following which the tissue samples will be made into blocks and slides. Small blocks of tissue and corresponding microscope slides will be kept in the hospital pathology laboratory and will form part of a person's medical records.

In rare cases, the only way that the pathologist can determine the exact nature of the condition is for a whole organ to be retained for detailed examination. This mainly applies to diseases of the brain, or more rarely, the heart. Such examinations may take up to six months to complete. In such circumstances you would be contacted by a member of hospital staff who will explain the reasons for temporarily retaining the organ. You may be asked to give written agreement for a specified organ or organs to be retained for diagnostic purposes by the pathologist.

The doctor may also take blood and other body fluids, for special tests, such as looking for infection. Once the tests are completed, these samples would normally be retained for six months, and then disposed of according to hospital policy. However if you have strong feelings about these samples, then you have the same choices available to you as for tissues and organs.

If you stipulate it, a hospital post mortem can be limited to one body cavity (for example, the chest) or organ system (for example, the lungs), but this may not provide all possible information about the disease or cause of death.

Occasionally, the doctor will need to take photographs during the post mortem procedure, to document the findings. These photographs are normally retained by the pathologist who conducted the post mortem examination, for the purposes of case review or for clinical teaching purposes. Any teaching will be done anonymously and the staff who view the photographs will not know from whom they were obtained.

What happens afterwards?

If you wish, you will be able to see your child, partner or relative's body again after the post mortem, before proceeding with your funeral arrangements. We would advise that you discuss these arrangements with your funeral director.

Usually the results of the examination will be available within about 2 weeks. However to allow for completion of the laboratory tests, the result may take longer if any fluid or tissue samples have been taken as part of the post mortem examination. A copy of the report will usually be sent to your child, partner or relative's GP, and you may wish to make an appointment to discuss the results with the hospital consultant.

If any organs or tissue had to be retained after the post mortem for further examination;

- You may wish to delay the funeral until the organ and/or tissue samples can be reunited with the body.
- You may choose to have the organ and/or tissue samples returned to your funeral director for a separate burial or cremation once the examination is completed.

We would not recommend having blood or other body fluids reunited with the deceased or for a separate burial or cremation.

- The hospital can dispose of the organ and/or tissue on your behalf in a dignified and respectful method, according to the hospital policy.
- You may choose to donate the organ for use in medical education, ethically approved research, public health surveillance, audit and to help the diagnosis of other patients.
- Tissue samples may be kept as part of the records of the case, in addition you may allow them to be used for ethically approved research, teaching, public health surveillance, audit and for the purpose of diagnosis.

We would always strongly recommend that the tissues are retained as part of the records for examination in case there is ever any query they can be looked at again. This can also be of benefit to the family in the future should there be a family history of a disease.

Each option will be discussed with you in detail, so that you will be able to make an informed decision.

Explanation of terms

The most common words and terms used to describe what happens in a post mortem examination are explained here. It is important you understand exactly what is involved before you give your consent to a post mortem, so if there is anything you're not sure of or don't understand, please don't hesitate to ask.

Audit

This is about checking standards of care and service. Some separate testing of tissue is needed to make sure that the standards of testing are of a high quality. Some tissue samples are needed as a control against diagnostic tests, or to check on standards in a hospital pathology service.

Coroner

The coroner is an independent judicial officer responsible for investigating deaths. He or she is either an experienced lawyer, or an experienced doctor who has also had legal training. The coroner in this area is **Dr. Peter Dean**. The Coroner's office is at **Shire Hall, Raingate Street, Bury St. Edmunds, IP33 2AP. Telephone: 01284 774167**

Diagnosis, diagnostic use of tissue, and diagnostic tests

This is when tissue samples are examined to find out as clearly as possible what was wrong with the person before they died. Looking at tissue with a microscope can identify diseases that could not be seen any other way, including those caused by genetic disorders. New medical conditions are recognised all the time. If tissue samples have been retained, it is sometimes possible at a later date to diagnose these new conditions in cases in which they were previously undiagnosed, or given a different diagnosis.

Education (medical education, teaching and training)

Examining tissue is one of the most important ways in which doctors learn about illness and how to treat it. Sharing information between doctors is important in maintaining high standards of care. Students and doctors in training need to observe and learn about post mortem examinations, and to discuss the procedure and findings, with an experienced doctor.

Fixing

Preparation of tissue or whole organs for further testing by preserving with chemicals.

Full post mortem examination

A full post mortem examination involves examination of each of the main body systems including the brain and all of the chest and abdomen. It will normally include the removal and retention of small tissue samples for examination with a microscope. Sometimes whole organs may be retained for closer examination.

Limited post mortem examination

If you wish, a hospital post mortem can be limited to one body cavity (for example, the chest) or organ system (for example, the lungs). This may not provide all possible information about the disease or cause of death.

Organ

A part of the body, composed of more than one tissue, that forms a structural unit responsible for a particular function (or functions). The body contains many organs, such as the brain, heart, lungs, kidneys and liver.

Post Mortem

This Latin phrase literally means 'after death'. A post mortem examination is a medical examination after someone's death. It is also called an autopsy (which means 'to see for oneself') or sometimes necropsy (which means 'to look at the dead'). Post mortem examinations are done by pathologists, who are specially trained doctors, with help from technical staff.

Retaining or retention of tissues and/or organs

Sometimes one or more whole organs, part of an organ or tissue samples are kept after the post mortem examination in order to reach a diagnosis. Reasons for this are:

- The organ or part of it may need to be examined with a microscope.
- The organ may show signs of a complex abnormality that requires a more detailed examination, perhaps by another specialist.
- The tissue or organ may need to undergo preparation before it can be examined. Preparation may take several days and sometimes many weeks.

With your permission, an organ (or part of an organ) might also be retained for use in medical research or education.

If the organ shows a particularly clear example of a specific illness, it may play an important role in the education of medical students, doctors and nurses.

Tissue

A collection of human cells specialised to perform a particular function. Organs contain tissues. For example, the heart contains muscle tissue composed of cells that contract to pump the blood around the body. In addition, it also includes blood vessels, fat and nerves.

Tissue samples, blocks and slides

To understand an illness or cause of death properly, the doctor needs to look at part of the affected organ under the microscope. To do this, small samples of tissue are taken from the organ (usually about 1 cm across and about 5 mm thick). These samples are made into hard blocks using wax. From these, very thin sections, 10 times thinner than a human hair, can be cut off. They are placed on glass slides so that they can be examined under a microscope. More than one section can be cut from one block.

For your notes:

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