

Histopathology Department

A guide to the adult post-mortem examination

Please accept our sympathies for the loss of your loved one.

You may have been asked to give your consent for a post-mortem examination; hopefully this leaflet explains a post-mortem in a clear way. We appreciate that it may be hard to process this information now, so if you have any questions, a member of the team could also take you through the consent form if that's helpful.

Please feel free to ask any questions you may have at any time during the consenting process.

What is a post-mortem?

This Latin phrase literally means 'after death'. A post-mortem examination is a medical examination that aims to find out more about a person's last illness and the cause of death. It is also called an autopsy. Post-mortem examinations are done by pathologists, who are specially trained doctors, with help from fully trained technical staff.

What are the different types of post-mortem?

There are two types of post-mortem:

1. Post-mortem examinations required by **coroners** (these are independent legal officers who are appointed by local authorities to investigate the cause of a death). These are investigations required by law and do not need to be agreed to by relatives. A coroner's post-mortem is required if the cause of death is unknown or unclear.

2. **Consented** post-mortems, also known as **hospital** post-mortems, are requested by doctors or by relatives. For these post-mortems the next of kin (a specific relative or loved one) will need to give permission, or consent, for a post-mortem on your loved one. This decision can be very difficult and should be made when you feel you have had all the information you need. The information can be provided in writing and talked about in person. You do not need to give consent. You are also free to change your mind and withdraw consent. If you do give your consent, we'll ask you to sign a form in the same way as you would for an operation or medical test.

A consented post-mortem can't happen unless someone in a 'qualifying relationship' (the next of kin or the person with legal authority to give consent for a post-mortem) gives their consent.

The next of kin can also have a say in how the post-mortem is done. They may not want a **full post-mortem**, but only certain organs/body parts to be examined, this is known as **limited post-mortem**.

Another option, which is similar to a limited post-mortem, would be a **biopsy post-mortem**. A biopsy post-mortem collects samples from the main organs and fluids using a needle (about the

size of a knitting needle) without opening the patient's body. An ultrasound machine may be also used, like the one used during pregnancies, to see the organs that will be sampled.

The benefits of a biopsy post-mortem are that it does not involve opening your loved one's body, and as it is a faster process than any delay to funeral planning could be avoided, and the quality of the sample improved. Therefore, the chance for us to be able to give you more diagnostic information about your loved one.

Why am I being asked about a post-mortem?

If you are being asked for consent to a post-mortem, then the probable cause of death is known. More detailed information from a hospital post-mortem can be extremely valuable to the family. It can help explain why a person died and identify complications of the illness or treatment. The post-mortem may occasionally find an alternative explanation for the death or reveal a health problem that could be treated or prevented in other members of the family.

Some families find a more detailed independent examination reassuring, even if nothing new is found.

Will the post-mortem help research?

This would be up to the family members of the person who has died. Tissues/organs can only be kept after a post-mortem with the express consent of a person in a qualifying relationship.

Examining tissue is one of the most important ways that doctors learn about illness and how to treat it. Tissue from post-mortems can be used to help doctors continue to learn about new conditions or treatments, teach specialist knowledge or to train medical students and new doctors. Post-mortem information can also help other families in the future.

Examining an organ or part of an organ may play an important role in the education of medical students, doctors and nurses, especially if it shows a particularly clear example of a specific illness. Again, this would only happen if you explicitly consent to this.

Donating organs for transplant is handled separately from the post-mortem procedure. Please ask a member of staff for more information or visit

<https://www.imperial.nhs.uk/patients-and-visitors/help-and-support/bereavement-services/organ-donation>.

When do post-mortems take place?

The post-mortem will be carried out as soon as possible after someone has died, as this will give the clearest result. It is usually within two to three working days of a death.

Who carries out post-mortems?

Pathologists, who are medically qualified doctors who specialise in the study of tissue diagnosis, carry out the post-mortem examination with help from trained technical staff. The examinations take place in the mortuary. A post-mortem examination is carried out with the same care and respect for your loved one as any other medical procedure.

What is involved?

A full post-mortem involves examining each of the main body systems including the brain and all the contents of the chest and abdomen. It normally involves the removal and retention of small tissue samples for examination under a microscope, the results of which may take several weeks following examination of the body. We could go into more detail with you about this if you'd like. The post-mortem cannot be officially finished until all of the analysis is complete.

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), but this may not provide all possible information about the disease or cause of death. If this is the case, relatives may opt for a biopsy post-mortem, see the details above.

Are the samples kept?

Small blocks of tissue and the corresponding microscope slides would be kept permanently in the hospital pathology laboratory and would form part of a person's medical records, unless you have specified otherwise. In some cases, organs and tissues may need to be temporarily retained for the preparation of blocks and slides – we will tell you if this is the case. The pathologist may have asked you to give written agreement for a specified organ or organs to be retained in order to help with the diagnosis.

What happens afterwards?

If you want to, you will be able to see your loved one's body again after the post-mortem. They will usually look similar to how they did previously, though they may have some scars after a full post-mortem. We'd be happy to talk you through this if you'd like.

Usually, the results of the examination will be available within about six weeks. The post-mortem result is sent to the senior clinician who was in charge of the team caring for your loved one. The senior clinician will be in charge of discussing the results with you. The samples and slides will be stored securely within the pathology department for 30 years. After this time, they will be disposed of by incineration.

There are some alternative options, if you'd prefer:

- You can request that the tissue/organ be returned to your loved one's body before the funeral. It usually takes between four and 12 weeks before all analysis is complete and the tissue/organ can be returned. Therefore, the funeral would need to take place after this time. During this time, your loved one's body may remain at the mortuary or at the funeral director's.
- You may choose to have the tissue/organ returned to you/your funeral director for separate burial or cremation.
- You may request the hospital to make arrangements for the disposal of the tissue/organ. If you choose this option, small tissue pieces will be sent for incineration and organs will be cremated at the local crematorium.
- You may choose to donate these for use in medical education or research. We're happy to discuss this with you if it's something you'd consider.

What if I change my mind?

We fully understand that this is a difficult time for you and that part of what you were told during the consent process may take time to fully sink in. We hope this information leaflet will help to clarify things but if you do have further questions or are uncertain about anything you have been told, please contact us as soon as possible. We will stop the post-mortem if you change your mind before the examination has taken place. The best person to contact is the person who obtained consent from you. We will give you their contact details.

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Explanation of terms

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 under a microscope can identify diseases that could not be seen any other way, including those caused by genetic disorders.

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 discuss the procedure and findings with an experienced doctor.

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.

Qualifying relationship

This legal term is used to indicate the people who have the authority to give consent for a post-mortem. The term usually refers to a partner or spouse but may also include other family members such as a parent, child, brothers or sisters, grandparents etc. We encourage the person in the qualifying relationship to discuss the post-mortem with other members of the family.

Those in a qualifying relationship to the deceased person are (highest first):

1. spouse or partner (including civil or same sex partner)
2. parent or child (in this context a 'child' can be any age)
3. brother or sister
4. grandparent or grandchild
5. niece or nephew
6. stepfather or stepmother
7. half-brother or half-sister
8. Long-term friend

Retaining or retention of tissue 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. We would ask your permission for this and explain why.

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 in the lab to create a glass slide before it can be examined under the microscope. Preparation may take several days and sometimes many weeks.
 - With your permission an organ (or part of an organ) could 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
- New medical conditions are recognised all the time. If tissue samples have been retained, it is sometimes possible later to diagnose these new conditions in cases in which they were previously undiagnosed or given a different diagnosis.

Tissue

A collection of human cells that perform a particular function, For example, the heart contains muscle tissue composed of cells that contract to pump blood around the body.

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,

ten times thinner than 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 any questions or more information, please contact:

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