Forensic pathology

Health & Medicine

Why those tissue samples were taken, of what importance- if any- such specimens would be especially, since for most of the tissues, the pathologist did not mark the organ from which it was taken?

Sudden death resulting from controversial incidents often needs an autopsy to find out what really happened. The procedure involves deriving samples from various organs and tissues for DNA sequencing, possible disease infliction and other internal cause determination. This can provide enough knowledge to the family and may help in further investigation. The present scenario has a submerged body; the pathologist takes the samples from different organs without marking. This is because if the samples are supposed to go for DNA sequencing or finger printing then the DNA from every cell or tissue of the same body is exactly the same. So to find anomalous behavior more than one sample is withdrawn. These tissues are sliced into blocks and mounted on slides for microscopic analysis and are further subjected to various tests.

The Y-incision is performed to gain access to vital body organs and see if any physical assault has been made or whether the deceased was suffering from a disease. These organs are weighed either collectively or separately depending on the severity of scenario. Usually the weight is reduced in case of traumatized organs. (Prahlow, Byard. 2011)

Tissue sampling from the stomach can be useful to indicate if any poison was given to the victim. This can help indicate the time of death as well. Usually samples from other organs such as gall bladder, liver, urine, eye fluid etcetera are also obtained to make sure of poisoning and digestion levels. In case of murder or assault the body is not normally returned to the family until the many staged investigation is carried out. Moreover if the head injury

is not visible to the eye then samples from the brain are also obtained.

Are such samples only taken in cases of submerged bodies, and if not, asks that you give him at least four other examples of when such samples might be taken and what might be discovered in subsequent examinations of such tissues?

Such samples are taken in every-day postmortem cases of natural death as well. But the procedure is a bit more detailed and lengthy for victims of unnatural death. Not only in submerged cases but also in many other scenarios. Four of which are stated as follows:

Someone dies of suspicious death without any witnesses and unexpectedly, requires autopsy legally. To find out if the victim was traumatized or drug abused. Common cases are homicide, manslaughter or murder.

Unexpected death of a child to answer questions like; Why? How? When and Where?

Death of a prison inmate requires autopsy.

To solves cases like medical malpractice at the hands of a licensed doctor or general physician.

To find out genetic defects leading to various diseases that caused sudden death.

So basically an autopsy is performed to find out the hidden cause of death and tracing it all the way back to the murderer. This tissues sampling is an important step in every postmortem study, of either natural or unnatural causes of death.

Further testing of these tissues helps in DNA finger printing, it helps to find the DNA sequence differing form the overall sequence of the body. This might be the murderer’s for example, a rape victim scratched the face of her

assaulter and some skin fragments got caught in her nails, or maybe a hair. This can help in identifying the criminal.

Moreover tissue poisoning and hidden assault to the internal body parts can be disclosed by testing the digestive tract with samples derived from various organs. This is important as it can tell the exact time when the poison kicked in. tissues from brain can help on diagnosing if any trauma was inflicted on the brain if the head doesn’t show any evident physical injury.

REFERENCE:

Josph A. Prahlow, Roger W. Byard. (2011) Atlas of Forensic Pathology: For Police, Forensic Scientists, Attorneys and Death Investigators. Forensic Science. Springer Science & Business Media.