



WHAT IS VIRTUAL AUTOPSY?

What is virtual autopsy? – virtual autopsy also known as post-mortem CT (PMCT), is a non-invasive imaging autopsy.

How does virtual autopsy work? – *Step1*: CT images of a decedent are taken; *Step 2*: the CT images are interpreted by a forensic radiologist (to help determine the cause of death)

How reliable are virtual autopsies' results? – various studies have shown that in many cases virtual autopsy is as reliable as traditional autopsies. (Note: Forensic institutes in Europe, Australia and Japan have been using PMCT in their daily routine for many years – a few major US centers have been doing so as well and the trend is now catching up nationwide)

What are the applications for virtual autopsies? – Blunt trauma, Penetrating trauma, Unidentified bodies, Falls from heights, Suspected elder abuse, Drowning, Unknown cause of death, Suicide, Contraband, Decomposition, Burns, Traffic accidents, Badly damaged bodies (due to train or plane accidents), Gunshot incidents...

When can a virtual autopsy be used? – 1- to assist forensic pathologists (before a traditional autopsy), 2) to assist forensic pathologists (instead of a performing a traditional autopsy), 3) when no forensic pathologists are available

What are the advantages of virtual autopsy? – 1- Religious and cultural objections (Jewish, Muslim, Native American Indian communities...), 2- assisting forensic pathologists – to help improve their findings, 3- assisting forensic pathologists – when they can't cope with the many cases on hand, 4- assisting forensic pathologists – to free them from unnecessary traditional autopsies, 5- when a forensic pathologist is not available...

How can we have access to Virtual Autopsy (PMCT)? – ADS provides very affordable (modular) solutions. ADS provides: 1) CT system, 2) Training of your staff for operating the CT, 3) access to forensic radiologists to read the CT images (and provide you with a findings report [on cause of death]), and more...



How can we justify / afford the services?

- You can share the services with other counties
- You can charge other counties for allowing them to use your services (premises)
- Note: The cost is a lot less than what you think call ADS for a quote

How expensive is a Virtual Autopsy (PMCT) service? – ADS provides very affordable solutions as follows:

- 1- CT system leasing includes:
 - o Installation
 - Unlimited amount of 2D and 3D scans
 - PACS to transmit the images to forensic radiologists
 - Warranty
- 2- CT operation training (of your staff)
- 3- Forensic radiology report
- 4- And more...

How complicated is it to use a CT system? – ADS provide an effective training program for your staff that allows you to take images at will / in your own time

What are the advantages of a CT system v/s a Whole-body x-ray system?

- CT allows you to take both 2D and 3D full body images 3D images are used by the forensic radiologist for the virtual autopsy report
- Whole-body x-ray system only provides 2D images

Note:

"Unlike traditional autopsies, which are invasive and result in the destruction of tissue, Virtopsy (Virtual Autopsy) leaves the cadaver intact and creates an objective 3D data set that can be shared with other experts," says Ruder. "And if 10 years from now new evidence comes to light, you can return to the original data set at any time. I've had a couple of cases where I've initially overlooked relevant findings only to detect them when reviewing the case with a colleague." – Reference: "Virtual Autopsy – Does it spell the end of the scalpel? – by Mark Honigsbaum – The Observer – Forensic Science"

https://www.theguardian.com/science/2013/feb/23/virtual-autopsy-virtopsy-forensicscience

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