



Done By:

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Recourses :

- Simpson's Forensic Medicine By Richard Shepherd -12th edition
- Doctor's slide
- Lecture notes

1st Lecture Notes :

*(Notes Are Arranged By Slides Sequence {in red boxes}).

*Before starting, delete the empty slides (11, 12) and slide no. (29) And follow the new arrangement.

***Slide no. 2:**

- What is Medicine?

⇒ The science of diagnosing, treating, or preventing disease and other damage to the body or mind.

- What are the modalities in treatment in Medicine?

⇒ Drugs, surgeries, physical therapy (physiotherapy) ... etc.

- Medicine is the big umbrella. Everything goes underneath it.

- By Medicine; you look at the whole picture.

***Slide no. 3:**

- What is Forensic Medicine?

⇒ It is one of the largest and most important areas of forensic science. It applies medical knowledge to criminal and civil law. (Legal Medicine/Medical Jurisprudence).

- Jurisprudence is the science of law (Law based on ethics, morals ...).

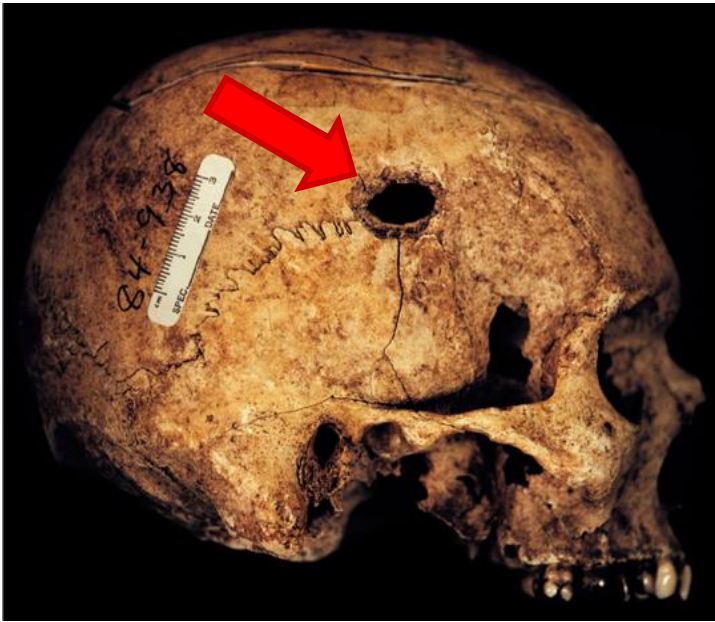
- In Forensic Medicine, we call Murder: Homicide.
(It refers to the act of a human killing another human.)

- Murder, for example, is a type of homicide.
It can also describe a person who has committed such an act, though this use is rare in modern English.

- Homicide is not always a punishable act under the criminal law, and is different than a murder from such formal legal point of view.

{ "Crime" is the bigger image. }

***Slide no. 4:**



-What do you see in this picture?

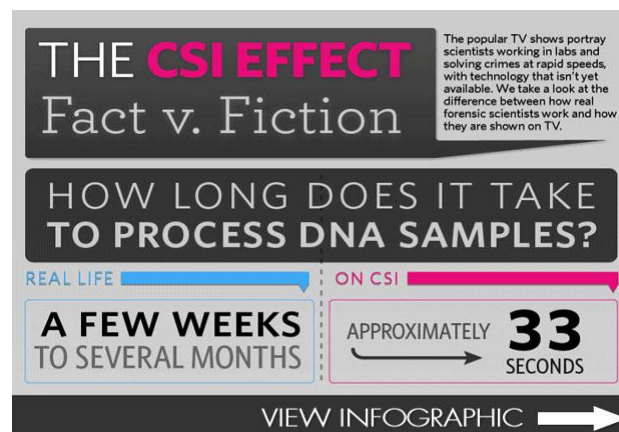
⇒ A hole in a skull.

-You said a "Hole" because it's the first you notice. And you described what you saw and not the cause of it!

Many reasons may cause such an injury (ex. A Bullet!) But whatever the cause is, Always objective not subjective.

That's what forensic is all about ☺

***Slides no. 6,7,&8:**



-Such shows, may affect the community/jury.

-Sometimes, the community/jury have CSI effects or CSI syndrome because of watching such series.

-Criminalistic is a Forensic Scientist. And does not belong to Medicine or Anthropology.

***Slide no. 10:**

A Crime is not necessarily a Murder.

***Slide no. 11& 12:**

-Forensic science includes many sciences: ➡

- Forensic Pathology.
- Forensic Toxicology.
- Forensic Psychology.
- Forensic Anthropology.
- Forensic Archaeology.
- Forensic Entomology.
- Forensic Odontology.
- Forensic Serology.
- Forensic Botany.
- Computer Forensics.
- Criminalistics.
- DNA Typing.
- Fingerprints.
- Document Examination.
- Forensic Reconstruction.
- Forensic microanalysis.
- Ballistics.

-Forensic Medicine consists mainly of **Forensic Pathologists**. But may also include: ➡ (like Dr. Khaldoun ☺)

-Paediatrics. (In case of child abuse for example).

-Geriatrics.

-Obstetrics and Gynaecology.

-Psychiatry.

-Emergency Medicine.

-Ophthalmologists.

***Slide no. 14&15:**

Forensic Pathology

- What is pathology?

➡ Study and diagnosis of disease, by examination.

-Examining: organs, tissues, bodily fluids, and whole bodies (post-mortem examination/autopsy).

-General Pathology: Scientific study of disease processes.

-Medical Pathology:

a--Anatomical pathology.

b--Clinical pathology.

-General/Scientific Pathology:

All areas of study include cellular adaptation to injury, necrosis, inflammation, wound healing, and neoplasia.

-The application of this knowledge to diagnose diseases in humans and animals forms the foundation of pathology.

a-Anatomical Pathology:

▪ Cytology. (When the anatomist specialises in cell studies).

▪ Surgical Pathology/Histopathology.

(When the anatomist specialises in tissues studies).

▪ Post-mortem examination: Medical & Forensic. (Studying the whole body).

▪ Genetic/molecular Pathology. (Studying the morphological changes).

b-Clinical Pathology:

- Biochemical Pathology.
- Haematology.
- Immunopathology.
- Microbiology.

***Slides no. 16,17&18:**

-What do Pathologists do?

★ 1. Diagnose and characterize disease in living patients, by examining biopsies or bodily fluids and interpreting medical laboratory tests.

-For example:

* The vast majority of cancer diagnoses are made by pathologists.

----**Biopsies:** To find out whether it's benign or cancerous.

----**Genetic testing:** To determine appropriate treatment for particular types of cancer.

★ 2. Improve a patient's medical care and guide treatment, through cytology, surgical pathology/histopathology.

★ 3. Conduct autopsies in order to investigate causes of death and find out any hereditary disease that is unknown to the patient's family.

★ 4. Managing of Medical laboratories, by setting guidelines and standards quality and safety. And Development of laboratory information systems.

-Most pathologists do not perform original research.

- >70 % of all decisions about diagnosis and treatment, hospital admission, and discharge rest on **Medical Test results**.

***Slides no. 20&21:**

-What is Forensic Pathology?

⇒ Is a subspecialty of *Pathology*. That deals with the examination of living or dead persons.

-It provides an opinion concerning:

-Cause,

-Mechanism,

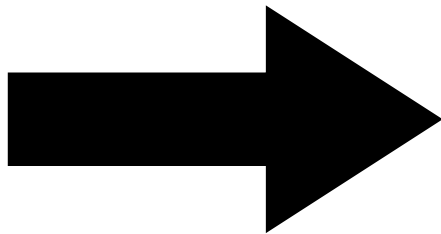
-Manner of disease, injury or death. It's important to know the pattern of injury to know the weapon that caused it.

-Identification of persons.

-Significance of biological and physical evidence.

-Correlation and/or reconstruction of wounds, wound patterns, and sequences.

-Conducting comprehensive medico-legal death investigations.



-What are types of Death?

1. Natural.
2. Homicide.
3. Suicide.
4. Accident.
5. Undetermined.

-Forensic Medicine applies techniques of pathology to the needs and protection of:

-Public health,

-Public safety,

-Quality assurance,

-Education in medicine,

-Research,

-Jurisprudence

-And Administration of justice.

And its highest goal is the development of strategies to prevent injury, disease, and death.

*Slide no. 22&23:

-There are two types of Post-Mortem Examination (PME) :

a—Hospital PME : Done by Pathologist.

b—Medico-Legal PME : Done by Forensic Pathologist.

-These two types are entirely different in procedures, motivations, and consequences.

b—Medico-Legal Post-Mortem Examination:

-Consists of 5 components:

⇒ □ Scene (investigation, history...).

⇒ □ External examination.

⇒ □ Internal examination.

⇒ □ Laboratory studies.

⇒ □ Synthesis of findings.

-The Medico-Legal PME starts at the scene → The team transfers information to pathologist → The Pathologist attends scene.

-It's VERY IMPORTANT to inform the pathologist of the scene findings. Otherwise, Major errors can result.

-But, Why THE SCENE?

⇒ PME findings can only be interpreted in context.

History

-Medical and social history.

-Events surrounding death.

Scene

-Scene-PME correlation.

-Continuity of information.

-“Looking” and “Seeing”.

*Slide no. 26-32:

-Regarding the applied systems, there are:

a—Coronor System:

- Elected official.
- Need not even be a medical doctor.

b—Medical Examiner System:

- Centralized offices, inter-county, regional arrangement.
- Both law enforcement powers. To hire their own homicide investigators.
- Quasi-judicial powers. To call inquests and take sworn testimony.

-What is Islamic jurisprudence Council, of the Muslim World League?

⇒ It's a council that is based on necessities which calls for the post-mortem examination of dead bodies, and with which the post-mortem examination, becomes more a benefit than a depravity of violating the dignity of the dead human.

-It decides the following:

⇒ **First:**

It is permissible to perform a post-mortem examination for one of the following purposes:

- (A) Investigation in a criminal proceeding, to find out the reasons of the death or the committed crime, that when it becomes ambiguous for a judge to know reasons of death, and it becomes apparent that the post-mortem examination is the way to find out these reasons.
- (B) Verification of diseases that require a post-mortem examination, in order to take protective precautions in light of that, and appropriate treatments for those diseases.
- (C) Teaching and learning Medicine, as is the case in medical colleges.

⇒ **Second:**

In anatomy dissection for the purpose of education; the following restrictions should be taken into account:

(A) If the body was of a known person, it is required that this person has given permission before his death for an anatomy dissection on his own body, or his heirs permit that after his death. An anatomy dissection of a **Free Man** should only be done when necessary.

This "Free Man" is a suggested term for the Arabic concept الدم معصوم

(B) Anatomy dissection should be carried out to the extent necessary, so as not to tamper with the bodies of the dead.

(C) Anatomy dissection of bodies of women should not be executed by doctors other than female- ones, unless they were not available.

⇒ **Third:**

In all cases, all parts of the examined body should be buried.

Thanks