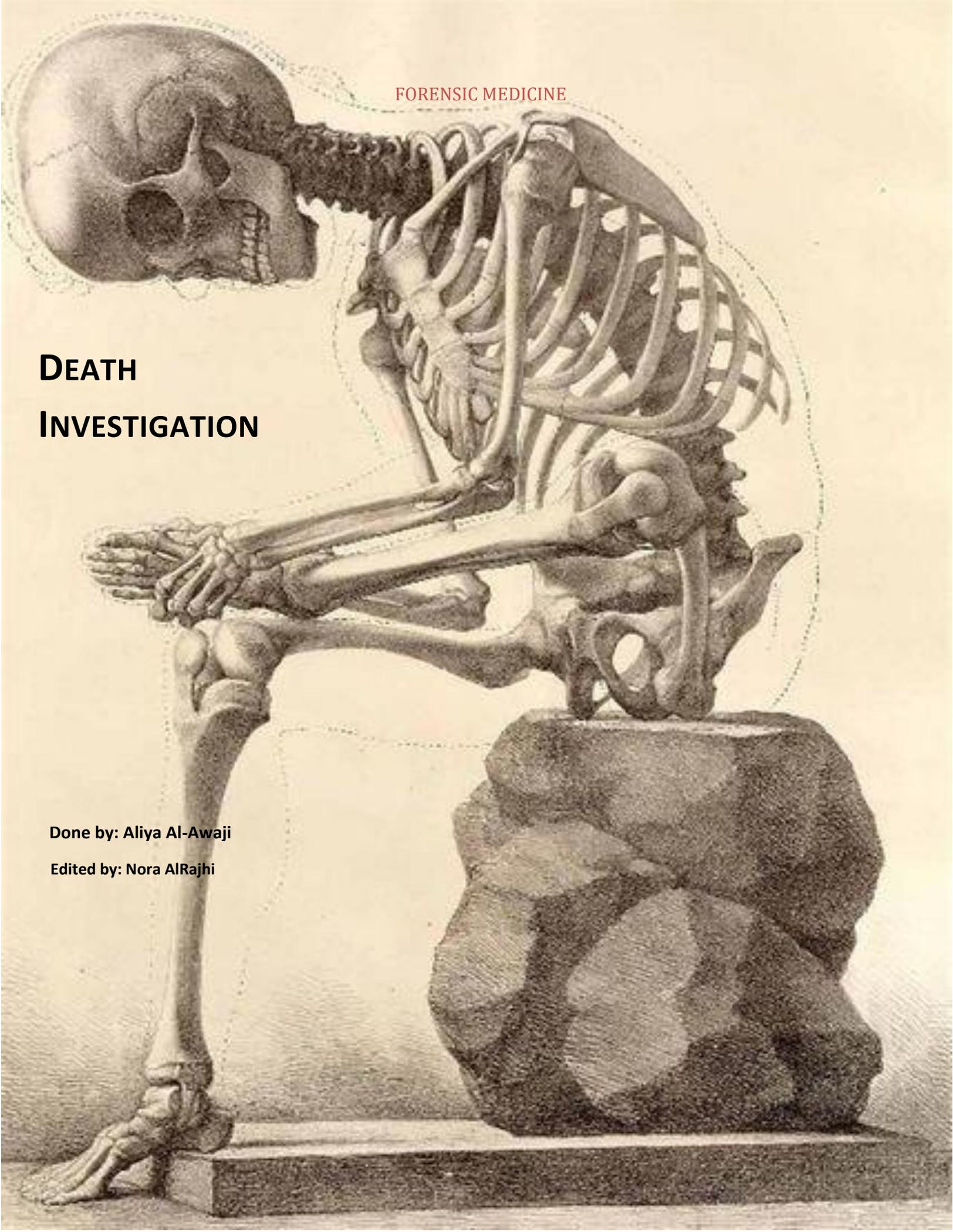


FORENSIC MEDICINE

**DEATH
INVESTIGATION**

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DEATH INVESTIGATION

Death Investigation is done to determine the cause and manner of a person's death. Investigations of this type require a team of skilled practitioners.

A death investigation team may include experts such as: death investigators, police officers, crime scene investigators, coroners/medical examiners, pathologists, paramedics, forensic anthropologists, and forensic odontologists, among others.

Each member of the team is critical and each role provides necessary information that may ultimately contribute to the resolution of the investigation.

Ideally, every death gets investigated. Regardless of whether the manner of death is known or is still undetermined. When a death gets investigated the number one thing they look for is the cause. Cause of death is a disease or injury that initiated the events that lead to death. There are four manners in determining death; natural, accidental, homicidal and suicidal. A great example would be a self-inflicted gunshot of the head is of a suicidal manner. Manner may also be undetermined.

It is part of the investigation to indicate when? Where? How? Did you find the body. Once you answer these questions you fill the death certificate.

An important point that you have to know is that the Coroner or the Medical Examiner is a system. And in almost all institutions the Medical Examiner is a pathologist.

What sequence do we follow when investigating death?

1. History and investigation of the scene
 2. External examination
 3. Internal examination (autopsy)
 4. Laboratory studies
 5. Reporting and recommendations
- Like any medical procedure, we start by taking history from the family, friends or any witnesses at the scene, if any. Or more commonly from the scene investigator. Performing an autopsy may be the second step.

Why do we investigate death?

Determining the cause and manner of death is one reason. Another reason is preventing similar incidents in the future.

It's important to identify the deceased. This is done using different modalities depending on the circumstances surrounding death. For example, if a person died due to severe burns, it will be impossible to identify him visually, so he'll most likely be identified by an odontologist.

What are the methods of identification?

Positive	Non-Positive (circumstantial)
<ol style="list-style-type: none">1. Visual identification. (Not scientific but positive)2. Fingerprints. (scientific) <u>comparative</u>3. DNA (scientific) <u>comparative</u>4. Dental records. (scientific) <u>comparative</u>5. Unique medical characteristics. (not scientific)6. X-ray (scientific)7. Surgical hardware implants	<ol style="list-style-type: none">1. Features (e.g. deformities, marks and scars). (not scientific)2. Personal effects and distinctive clothing. (not scientific)3. Photograph and location.4. Tattoos and body piercings can be helpful in identifying unknown bodies. (not scientific)

What's an autopsy?

The word autopsy literally means to “see for one's self”. The terms necropsy and post-mortem examination can be used alternatively. An autopsy is a systematic examination of the body best by a qualified pathologist. Any physician can perform an autopsy (e.g. Saudi Arabia). The body is inspected for the presence of disease or injury and specimens of the vital organs and/or body fluids may be taken for microscopic, chemical or other tests.

In rare instances, an entire organ might need to be retained for detailed examination and/or consultation with a specialist. The autopsy procedure usually takes less than an hour in the usual simple cases.

What is Exhumation?

It's removing the body from its grave for further examination. A point worth mentioning is that, it's very rare. For example, a family suspected that their daughter was murdered and didn't die a normal death. In that case, they can exhume the body for further investigations. Exhumations are done for transport, identification or discovery of new evidence surfacing e.g. President Arafat.