

A spiral-bound notebook with a light-colored, textured cover. The spiral binding is on the left side. The text is centered on the cover.

Knives & Blunt Instruments

Chapter 15

Introduction

- Modern criminals tend to use other weapons besides poisons to achieve their goals.
- In the United States there are more murders committed by the use of a firearm.
- Second to firearms is murder by knife.
 - Why is this?

Introduction

- The use of a firearm often implies a degree of premeditation and can also provide evidence allowing forensic scientists to tie the weapon and untimely the user, to the murder.
- In a less planned attack, cruder weapons are used.
 - Switchblade, stiletto, kitchen knife, wrench, lamp, pipe, etc.

Introduction

- It is the job of the forensic scientist either to show that a particular weapon was the one used in a given case or, in cases where the weapon has not been found, to give a description of the weapon based on the victim's injuries to assist investigators in their search for evidence.

Evidence on the Victim

- In blunt instrument death the blow is usually to the head.
- It is relatively unusual to have only one blow. Common to have multiple blows.
- These blows usually cause a ragged laceration where scraps of tissue and blood vessels are driven into the surface of the underlying bones.

Evidence on the Victim

- The victim's head may show depression fractures where the bones of the skull were driven into the brain tissues, causing death by compression of the brain.
- Sometimes the shape of the fracture can reveal the shape of the weapon used.
- The site of the fracture area seen in the context of the victim's probable position when the blows delivered, and even the relative height and strength of the attacker.

Evidence on the Victim

Bruises

- A bruise is one of the most common types of injury.
- It occurs when there is a blow that causes small blood vessels to break under the skin.
- The discoloration and swelling in the skin are caused by the blood seeping into the tissue.

The Color of a Bruise

- Your body reabsorbs the blood with time, which causes the bruise to change color and eventually disappear.
 - Red Bruise = 0-2 days
 - Blue, Purple = 2-5 days
 - Green = 5-7 days
 - Yellow = 7-10 days
 - Brown = 10 –14 days
- Bruises heal over a series of several days to weeks.

Bruises

- Generally, the harder the blow, the larger the bruise.



Photo: www.souglow.net/2002_07_01_archive.html

Bruises

- In cases where the bruising was inflicted before death, a sample of the blood found beneath the skin at the site of the bruise usually shows a higher-than-normal white-cell count.
- If the bruise was inflicted after death, this process would not normally have progressed to the same extent.

Knife Wounds

- There is no foolproof technique for positively linking an individual knife to an individual victim.
- Knife wounds are almost always inflicted during close-range attacks.
- When using a knife to attack, almost certainly the attacker will get some of the victim's blood on him.
- Stab wounds are usually fatal only when they are inflicted with a sufficiently long blade to the chest or abdomen.

Knife Wounds

- Not all stab wounds are caused by knives. One can use any sharp object that would penetrate the skin.
- Sometimes stab wounds look like other kinds of wounds. A wound made with a stiletto or ice pick may look like a bullet wound.
- Fatal incised wounds are usually those delivered to the body's most unprotected areas:
 - The victim's neck

Homicide or Suicide

- Relatively few suicides use knives, though cases do occur, and forensic scientists have to recognize the signs that differentiate suicide and murder victims.
- Suicides that involve knives usually target one of four areas:
 1. Throat
 2. Chest
 3. Stomach
 4. Wrists

Homicide or Suicide

- In a suicide one would usually find one stab.
- May also find hesitation marks.
- A homicidal stab wound often penetrates a victim's clothing.
- Many times the clothing matches the real width of the weapon better than the wound does.
- Determine what “handed” the persons is.

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- See page 86-87