(Vulnerable: Session 7)

يعتذر فريق الطب الشرعي على عدم اكمال المحاضرة السابعة كاملةً بسبب ضيق الوقت،
تتكون من خمس فصول (٧ ،٨ ،١١ ،١٢ ،١٣)
تم اكمال: - الفصل (١٢،١٣، ٨ في المحاضرة الماضية)

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هذا رابط لتيم السنة الماضيه ٤٣٣

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رابط كتاب الطب الشرعي

Done by:-
Nawaf alfawzen

Ch.12 Sexual assault

Definitions and the law:

Rape	Assault by penetration	Sexual assault
(A) intentionally penetrates the **vagina**, **anus** or **mouth** of another person **(B)** with his **penis**. ➢ **(B)** does not consent to the penetration. ➢ **(A)** does not reasonably believe that **(B)** consents. A person found guilty of rape under this section is liable, on conviction on indictment, to **imprisonment for life.**	**(A)** intentionally penetrates the vagina or anus of another person **(B)** with a part of his body or anything else: - ➢ The penetration is sexual. ➢ **(B)** does not consent to the penetration. ➢ **(A)** does not reasonably believe that **(B)** consents. A person guilty of an offence under this section is liable, on conviction on indictment, to **imprisonment for life.**	**(A)** intentionally **touches** another person **(B): -** ➢ The touching is sexual. ➢ **(B)** does not consent to the touching. ➢ **(A)** does not reasonably believe that **(B)** consents. A person guilty of an offence under this section is liable: on summary conviction[1], to imprisonment for a term not exceeding **6 months** or a **fine** not exceeding the statutory maximum, or both; ➢ **(B)** on conviction or indictment, to imprisonment for a term not exceeding 10 years.

1.Summary conviction offences include the least serious offences

Examination requirements:

❖ It is important the complainants of sexual assault are examined by **competent**, **sympathetic sexual offence examiners**; these are generally physicians with a special interest in forensic aspects of medicine. Complainants (and suspects of sexual assault) should be offered the choice of a doctor of their own gender.

Urgent: Emergency contraception may involve use of: -

1) Oral contraceptive.
2) Insertion of an intrauterine device.

❖ Prevention of sexually transmitted infection, require appropriate prescribed medication for which standard prophylactic/therapeutic regimens will apply, Infection by the **human immunodeficiency virus (HIV)** is of great concern and specialist advice may need to be sought regarding post-exposure prophylaxis. **Hepatitis B** is a significant risk following male rape and that

risk increases with additional factors such as multiple assailants, intravenous (IV) drug use, or high prevalence area.

Medical assessment

Medical assessments of sexual assault complainants and suspects are to:

1) Identify and treat injury or other risk issues (e.g. infection).
2) To identify and collect evidence that may assist the courts to establish the facts of the case.

- **It is essential** that the examining doctor **explains** the nature, purpose and process of the assessment in order that consent is fully informed and that chaperones are used when appropriate. An assessment requires a **detailed history and examination.**
- **Recent** drug and alcohol intake must be recorded in as much detail as possible and this may be relevant in terms of **ability to recall events appropriately**.
- **Specific questions** are also asked about events after the assault as these may affect subsequent findings or recovery of evidence. Such questions include 'Since the assault have you... noted pain... noted bleeding... brushed teeth... passed urine... defecated... douched?' A full medical history must include past medical history, past surgical history, past gynecological history, menstrual history and past psychiatric history.
- A standard general physical examination will be done and a detailed physical, external examination identifying injury or abnormality and recording absence of injury and abnormality.

The following table (Next slide) summarizes the type of sample and what may be achieved from analysis of such a sample. In all cases if uncertain, confirm with forensic science laboratories.

1. The type of specimen required.
2. How it should be stored to ensure optimum preservation.

Sample type	What may be identified by analysis
Blood	Presence and amount of alcohol and drugs; identify DNA
Urine	Presence and amount of alcohol and drugs
Hair (head), cut and combed	Identify biological fluids (wet and dry); foreign material (e.g. vegetation, glass, paint, fibres); comparison with other hairs found on body; past history of drug use
Hair (pubic), cut and combed	Identify biological fluids (wet and dry); foreign material (e.g. vegetation, glass, fibres); comparison with other hairs found on body; past history of drug use (prescribed; licit and illicit)
Buccal scrape	DNA profiling
Skin swabs (at sites of contact)	Identify biological fluids (e.g. semen, saliva – wet and dry); cellular material; lubricant (e.g. KY, Vaseline)
Mouth swabs	Identify semen
Mouth rinse	Identify semen
Vulval swab	Identify biological fluids (e.g. semen, saliva); foreign material (e.g. hairs, vegetation, fibres)
Low vaginal swab	Identify body fluids (e.g. semen, saliva); foreign material (e.g. hairs, vegetation, fibres); identify biological fluids (e.g. semen, saliva); foreign material (e.g. hairs, vegetation, fibres)
High vaginal swab	Body fluids (e.g. semen, saliva); foreign material (e.g. hairs, vegetation, glass, fibres); identify biological fluids (e.g. semen, saliva); foreign material (e.g. hairs, vegetation, fibres)
Endocervical swab	Identify biological fluids (e.g. semen)
Penile swabs (shaft, glans, coronal sulcus)	Identify biological fluids (e.g. semen)
Perianal swabs	Identify biological fluids (e.g. semen)
Anal swabs	Identify biological fluids (e.g. semen)
Rectal swabs	Identify biological fluids (e.g. semen)
Fingernail swabs, cuttings or scraping	Identify foreign material (e.g. skin cells), matching of broken nails

Medical findings after sexual contact

- It is incorrectly assumed by many that sexual assaults will result in injury to the victim whether adult or child. This is incorrect and in the majority of cases medical abnormalities (in both adults and children) will be absent. Conversely, consensual sexual activity can result in injury to the body and genitalia. The presence or absence of injuries in association with allegations of sexual assault do not by themselves indicate whether the particular activity was consensual or non-consensual, and it is essential that these facts are understood when reporting and interpreting findings.
- Many factors may affect the severity of injury in the female. Similar injuries may be seen in both consensual and non-consensual sexual contact. Some of the factors that may influence the possibility of genital injury are age of the complainant, type of sexual activity, relative positions of the participants and degree of intoxication of either or both of the participants.
- Anal intercourse is part of the normal sexual repertoire of many heterosexual and homosexual couples. The likelihood of pain or injury in non-consensual anal intercourse may be increased:

1) In someone who has not experienced anal intercourse.
2) In the absence of lubrication.
3) If force is used.
4) If there is great disparity between the size of the anus (which varies little in the adult) and the penis (which may vary a lot).

Care after sexual assault

Care of those who have been sexually assaulted is most appropriately managed by those with specialist skills such as genitourinary medicine specialists who can provide the most appropriate and up to date post-assault treatment and advice.

It should be the responsibility of the examining doctor or healthcare professional to ensure that appropriate post assault prophylaxis against pregnancy, or HIV or other genitourinary conditions are anticipated.

Ch.13 Child assault and protection

Definitions and the law:

The United Nations Convention on the rights of the Child **(UNCRC)** defined children as persons under 18 years of age. This age limit may be applied variably in different cultures and jurisdictions may vary in how that age limit is applied.

- **Child abuse** can be defined in a number of ways and many governments have systems in place to ensure that health professionals recognize that they have an overriding duty to report concerns if they believe that the child may be at risk of harm.
- **Physical abuse** of a child is defined by the World Health Organization as 'that which results in actual or potential physical harm from an interaction or lack of interaction which is reasonable within the control of a parent or person in a position of responsibility, power or trust'.

The term 'Non-Accidental Injury' (NAI) describes injury that was considered to be inflicted by another and by inference as a deliberate assault.

UK child abuse classification

- **Physical abuse** — Examples of physical abuse include hitting, shaking, throwing, poisoning, burning, or drowning.
- **Emotional abuse** — Is the persistent emotional ill-treatment or neglect of a child such as to cause severe persistent adverse effects on the child's emotional development.
- **Sexual abuse** — Involves forcing or enticing a child or young person to take part in sexual activities. Such activities may include physical contact, including penetrative or non-penetrative sexual acts.
- **Neglect** — Is the persistent failure to meet a child's basic physical or psychological needs, likely to result in the serious impairment of the child's health or development. It may involve a parent or carer failing to provide adequate food, shel-ter and clothing.

1) physical abuse:

- Non-abusive bruises tend to be **small**, sustained over **bony prominences**, and found on the front of the body.
- Abusive bruises are away from bony prominences; the commonest site is **head** and **neck** **(particularly face)** followed by the buttocks, trunk, and arms.
- Examples of patterns of injury that should raise the possibility of physical abuse include multiple facial bruising, bruises to the ears, neck or abdomen, multiple old scars, cigarette burns, bite marks or torn frenulum[1].
- In infants (under 18 months) physical abuse must be considered in the differential diagnosis when they present with a fracture in the absence of clear history of trauma
- Bruises in non-mobile infants, bruises over areas of soft tissues, patterned bruises and multiple similar shape bruises should also raise concerns
- Scalds injury: -
    1) Intentional: often immersion injuries with symmetrical, well-defined clear upper margins.
    2) Unintentional more commonly result from spill injuries of other hot liquids; they usually affect the upper body with irregular margins and variable depth of burn.
- Examples of features that may support abuse include discrepancies in the history, a changing account, different accounts by different careers and delays in presentation.
- If physical abuse is suspected:
    1) Laboratory-based investigations include blood count, urinalysis, liver function, amylase, calcium, phosphorus, vitamin D, screen for metabolic bone disease; coagulation studies.
    2) Radiographic skeletal survey, which must subsequently be reviewed by a pediatric radiologist.
    3) Bone scintigraphy.

Box 13.1 Types of injury in physical abuse

- Head injury – of all types; the 'shaken-baby' syndrome is an extremely complex area requiring multi-professional input and assessment to determine the relevance of clinical and radiological findings
- Skin injury – in particular it is important to recognize possible slap marks, punch marks, grip marks, pinching and poking marks; certain injuries (e.g. cigarette burns) are readily identifiable
- Abdominal injury – all intra-abdominal organs can be damaged by direct impact (e.g. punches or stamps)
- Chest injury – squeezing or crushing can result in substantial injury including rib fractures, ruptured great vessels and cardiac bruising
- Skeletal injury – a range of injuries may be seen, from frank fractures, via metaphyseal fracture to subperiosteal new bone formation

[1] A fold of skin beneath the tongue, or between the lip and the gum.

2) Sexual abuse:

- There are many ways in which a child may disclose abuse; **For example,** it may be to a **teacher**, a **friend** or a **sibling**.
- The sexual abuse may be chronic and long term or it may be an acute or single episode.
- Disclosure may be delayed for many years in chronic cases, or for a few days in acute episodes, which may result in loss of forensically supportive evidence.
- Pubertal and pre-pubertal girls are more likely to have significant genital signs if they are examined within 7 days of the last episode of sexual abuse.
- Examination of a female alleging penetrative sexual assault pre-pubertal but disclosing in her thirties after vaginal delivery of children will provide no information.
- Anal signs in particular are more likely to be present in the acute phase (within the first 72 hours)
- The assessment may be undertaken by a single doctor if that doctor has the necessary knowledge, skills and experience for the case.
- It is considered essential for a permanent record of the genital or anal findings to be obtained whenever a child is examined for possible sexual abuse.
- Most complainants of child sexual abuse have no examined after alleged sexual abuse.

Box 13.2 Types of injury that may be seen in sexual abuse

Findings that may be noted in females:
- Genital erythema/redness/inflammation
- Oedema
- Genital bruising
- Genital abrasions
- Hymenal transections
- Hymenal clefts and notches
- Labial fusion
- Vaginal discharge in pre-pubertal girls

Anal findings in males and females may include:
- Anal/perianal erythema
- Perianal venous congestion
- Anal/perianal bruising
- Anal fissures, lacerations, scars and tags
- Reflex anal dilatation

3 & 4) Neglect & emotional abuse:

- A number of behavioral characteristics may indicate both neglect and emotional abuse, **For example** age-inappropriate social skills (e.g. inability to use knife and fork), bedwetting and soiling, inability to self-dress, smoking, drug and alcohol misuse, sexual precocity and absenting from school.
- During assessment and physical examination certain features associated with possible neglect may be evident including unkempt child, ill-fitting or absent items of clothes, dirty or uncut nails, local skin infections/excoriations and low centiles for weight and height.
- Certain groups of children are at particular risk of emotional abuse such as unplanned or unwanted children, children of the 'wrong' gender, children with behavioral issues and children in unstable or chaotic family setting.

Factitious Disorder by Proxy (also known as Munchausen Syndrome by Proxy or fictitious or factitious illness by proxy, fabricated illness by proxy or induced illness) is a term used to describe a setting in which a parent or career presents a false history or appearance of illness for their child to healthcare professionals.

Management of child abuse

The management of child abuse will depend on the type of abuse or abuses experienced and many other factors such as their health, and where they are living. Every jurisdiction will have its own legal requirements, policies, protocols and procedures.