



وزارة التعليم العالي والبحث العلمي
الجامعة التقنية الشمالية
المعهد التقني الدور



الحقيبة التعليمية

القسم العلمي: قسم تقنيات المختبرات الطبية

اسم المقرر: الاسعافات الاولى

المستوى: الاول

الفصل الدراسي: الثاني

السنة الدراسية: 2025-2026



الاسعافات الاولية				اسم المقرر:
قسم تقنيات المختبرات الطبية				القسم:
المعهد التقني الدور				الكلية:
الاول				المرحلة / المستوى
الثاني				الفصل الدراسي:
نظري	2	عملي	---	عدد الساعات الاسبوعية:
2				عدد الوحدات الدراسية:
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نظري	✓	عملي	كليهما	نوع المادة
				هل يتوفر نظير للمقرر في الاقسام الاخرى
				اسم المقرر النظير
				القسم
				رمز المقرر النظير
معلومات تدريسي المادة				
م.م أسماء عبد الحق محمد خلف				اسم مدرس (مدرسي) المقرر:
مدرس مساعد				اللقب العلمي:
2023				سنة الحصول على اللقب
ماجستير				الشهادة :
2019				سنة الحصول على الشهادة
13 سنة				عدد سنوات الخبرة (تدريس)

الوصف العام للمقرر :

- 1- تعريف الطلاب بالمبادئ الأساسية للإسعافات الأولية وأهميتها في إنقاذ الأرواح .
- 2- تمكين الطلاب من التعرف على الإصابات والأمراض الطارئة وكيفية التعامل معها .
- 3- تعزيز الثقة والقدرة على التصرف بسرعة وفعالية في المواقف الطارئة .
- 4- تطبيق المهارات العملية للإسعافات الأولية وفقاً للمعايير الدولية .

الاهداف العامة :

- 1- تعزيز الوعي بأهمية الإسعافات الأولية
 - تعريف الطلاب بدور الإسعافات الأولية في إنقاذ الحياة وتقليل المضاعفات.
 - فهم المسؤولية الأخلاقية والقانونية للمسعف الأولي.
- 2- إكساب المهارات الأساسية للتعامل مع الحالات الطارئة
 - تعلم خطوات التقييم الأولي للمصاب (فحص الوعي، التنفس، الدورة الدموية).
 - إتقان تقنيات الإنعاش القلبي الرئوي (CPR) للبالغين والأطفال والرضع.
 - التعامل مع حالات الاختناق (انسداد مجرى الهواء) باستخدام مناوره هيمليخ.
 - السيطرة على النزيف وعلاج الجروح والحروق والكسور.
- 3- التعرف على الإجراءات الصحيحة للحالات المرضية المفاجئة
 - التعامل مع النوبات القلبية، السكتة الدماغية، والصدمات.
 - تقديم الإسعافات الأولية لحالات الصرع، الإغماء، وضربات الشمس.
 - التعامل مع حالات التسمم والدغات واللسعات.
- 4- تطبيق إجراءات السلامة والأمان
 - تقييم بيئة الحادث وضمان سلامة المسعف والمصاب.
 - استخدام معدات الإسعافات الأولية مثل جهاز مزيل الرجفان الآلي (AED).
 - اتباع بروتوكولات مكافحة العدوى (مثل استخدام القفازات والأقنعة).
- 5- تنمية الثقة والقدرة على التصرف السريع
 - تدريب الطلاب على التحكم في التوتر واتخاذ القرارات تحت الضغط.
 - تطبيق سيناريوهات واقعية عبر المحاكاة العملية.
- 6- إعداد الطلاب للتعامل مع الكوارث والإصابات الجماعية
 - فهم أساسيات الإسعافات الأولية في الحوادث الجماعية (مثل الزلازل، الحرائق، حوادث السير .
 - تعلم مبادئ الإخلاء الطارئ وتصنيف المصابين حسب الأولوية .

الأهداف الخاصة :

- تعريف الطالب بـ المبادئ العلمية للإسعافات الأولية وفقاً للمعايير الدولية مثل دليل جمعية القلب الأمريكية AHA أو الصليب الأحمر .
- فهم التشريح الأساسي والوظائف الحيوية (الجهاز التنفسي، الدورة الدموية، والعصبي) وتأثيرها على الإسعافات.
- معرفة البروتوكولات الطبية للتعامل مع الحالات الطارئة (مثل خطة العمل) ABC: **Airway**, (**Breathing, Circulation**).
- إتقان الإنعاش القلبي الرئوي (CPR) للبالغين والأطفال والرضع باستخدام دمي التدريب.
- تطبيق تقنيات إزالة انسداد مجرى الهواء مثل مناورة هيمليخ للبالغين والرضع .
- القدرة على إيقاف النزيف (الضغط المباشر، الرباط الضاغط، رفع العضو .
- معالجة الحروق (حرارية، كيميائية، كهربائية) والكسور (التجبير المؤقت).
- استخدام جهاز مزيل الرجفان الآلي (AED) بفعالية.

الأهداف السلوكية او نواتج التعلم :

أمثلة أهداف تدريسية:

- بعد الانتهاء من الدرس (المحاضرة) سيكون الطالب قادراً على ان:
- 1- القدرة على التحكم في التوتر وضبط النفس عند مواجهة الحالات الطارئة.
 - 2- التصرف بسرعة واتخاذ قرارات سليمة في ظل الوقت المحدود.
 - 3- تجنب الذعر أو التردد الذي قد يعيق تقديم المساعدة الفورية.
 - 4- الالتزام بمبادئ أخلاقيات الإسعافات الأولية مثل:
 - 5- احترام خصوصية المصاب وكرامته.
 - 6- تقديم المساعدة دون تمييز (عرق، جنس، دين، إلخ).
 - 7- عدم التسبب في ضرر إضافي للمصاب (مبدأ "لا تضر. Do No Harm - "
 - 8- الإبلاغ عن الحالة بدقة للفرق الطبية عند نقل المصاب.

المتطلبات السابقة :

- 1 - تتطلب خلفية في العلوم الصحية (مثل التمريض، العلوم الطبية) كإضافة مفيدة .
- 2- فهم أساسيات علم الأحياء البشري مثل أجهزة الجسم الرئيسية: التنفس، الدورة الدموية،

العصبي .

3-معرفة بسيطة ب الرياضيات لحساب جرعات الأدوية في بعض الحالات المتقدمة .

4-لياقة بدنية تسمح بالتحرك السريع، الركوع، أو رفع أحمال خفيفة (مثل نقل المصابين في حالات

الطوارئ) .

5-تحمل مشاهدة إصابات بسيطة إلى متوسطة (دماء ، جروح، كسور) دون ذعر.

6-القدرة على التحكم في التوتر واتخاذ قرارات سريعة تحت الضغط .

الأهداف السلوكية او مخرجات التعليم الأساسية :

ت	تفصيل الهدف السلوكي او مخرج التعليم	آلية التقييم
1	يتعلم الطالب ماهو الاسعاف وكيف يقوم به بمختلف الحالات وكيف يتم الاسعاف في كل حالة على سبيل السرعة والثقة بالتنفس وكيف يتم التعاون مع طب الطوارئ في المستشفى وذلك بتسجيل حالة المصاب وماهو الاسعاف الذي قام به وتسجيل التاريخ والوقت	الامتحانات - يومية ونهاية الكورس
2	تعليم الطالب بضرورة وجود حقيبة الاسعاف في المنزل والسيارة والمدرسة	الامتحانات - يومية ونهاية الكورس
3	تعليم الطالب ضرورة سيارة الاسعاف لتقل المصاب وضرورة الاتصال قبل البدء بعملية الاسعاف	الامتحانات - يومية ونهاية الكورس
4	تعليم الطالب كيفية اسعاف بعض الامراض مثل مرض السكر ومرض الضغط وغيرها واطافة الى ذلك كيف تعامل مع شخص يحتضر قبل ان يموت ويستمر باسعافه لحين وفاته	الامتحانات - يومية ونهاية الكورس

أساليب التدريس (حدد مجموعة متنوعة من أساليب التدريس لتناسب احتياجات الطلاب ومحتوى المقرر)

مبررات الاختيار	الاسلوب او الطريقة
لاجل معرفة مدى فهمهم للمحاضرة واختبار معلوماتهم	1. شرح المحاضرة ومشاهدة مقاطع فيديو للاسعافات الأولية وطرح اسئلة للطلاب
لاجل ترسيخ المعلومات بذهنهم	2. تعزيز الشرح بوسائل ايضاح مثل دمية مجسم بشري
لاجل ترسيخ المعلومات وتكون واقعية وعملية	3. عمل زيارات الى المستشفى وشرح المحاضرة بالواقع
لاجل تثبيت المعلومات في عقلهم	4. شرح المحاضرة ويتم سؤالهم اسالة عملية في حياتهم
لاجل معرفت مدى فهمهم للمحاضرة وحث الطالب للانتباه اكثر	5. شرح المحاضرة وعمل اختبار ورقي بسيط

الاسبوع	الساعات	الموضوع	طريقة التعلم	اشكال الحضور	طريقة التقييم
الاول	2	مقدمة الاسعافات الأولية وطب الطوارئ	شرح المحاضرة بوجود شاشة ذكية للعرض	قاعة دراسية	الامتحانات
الثاني	2	مكونات نظام EMS والإدارة والسياسة والتنظيم والمعدات	شرح المحاضرة بوجود شاشة ذكية للعرض	قاعة دراسية	الامتحانات
الثالث	2	تركيب القلب ووظيفة الدورة الدموية وتصلب الشرايين	شرح المحاضرة بوجود شاشة ذكية للعرض	قاعة دراسية	الامتحانات
الرابع	2	الجلطة القلبية ، العلامات والأعراض وكيفية اسعافها	شرح المحاضرة بوجود شاشة ذكية للعرض	قاعة دراسية	الامتحانات

الاسبوع	الساعات	الموضوع	طريقة التعلم	اشكال الحضور	طريقة التقييم
الخامس + السادس	2	الذبحة الصدرية وطرق الإنعاش	شرح المحاضرة بوجود شاشة ذكية للعرض مع مشهد تمثيلي لانعاش المريض واستخدام الدمي الطبية	قاعة دراسية	الامتحانات
السابع	2	اسعاف حالات الغرق واستخدام الصعقات الكهربائية	شرح المحاضرة بوجود شاشة ذكية للعرض مع مشهد تمثيلي للاسعاف	قاعة دراسية	الامتحانات
الثامن + التاسع	2	اسعاف حالات الاختناق بوجود وعي للمريض او بدونه	شرح المحاضرة بوجود شاشة ذكية للعرض مع مشهد تمثيلي للاسعاف	قاعة دراسية	الامتحانات
العاشر	2	اسعاف النزيف	شرح المحاضرة بوجود شاشة ذكية للعرض مع مشهد تمثيلي للاسعاف	قاعة دراسية	الامتحانات
الحادي عشر	2	اسعاف مصاب السكري	شرح المحاضرة بوجود شاشة ذكية للعرض مع مشهد تمثيلي للاسعاف	قاعة دراسية	الامتحانات
الثاني عشر		العلامات الجسدية للموت المفاجئ	شرح المحاضرة بوجود شاشة ذكية للعرض	قاعة دراسية	الامتحانات
الثالث عشر	2	الامراض المعدية	شرح المحاضرة بوجود شاشة ذكية للعرض	قاعة دراسية	الامتحانات

الاسبوع	الساعات	الموضوع	طريقة التعلم	اشكال الحضور	طريقة التقييم
الرابع عشر	2	الصدمة	شرح المحاضرة بوجود شاشة ذكية للعرض	قاعة دراسية	الامتحانات
الخامس عشر	2	النوبات	شرح المحاضرة بوجود شاشة ذكية للعرض	قاعة دراسية	الامتحانات

المحتوى العلمي

رقم المحاضرة: 1	
عنوان المحاضرة:	مقدمة الاسعافات الأولية وطب الطوارئ
اسم المدرس:	م.م أسماء عبد الحق محمد
الفئة المستهدفة	المستوى الأول / الفصل الدراسي الثاني
الهدف العام من المحاضرة :	تعليم الطالب ماهي الإسعافات الأولية
الأهداف السلوكية او مخرجات التعلم:	1- يتعلم الطالب كيف يسعف المريض بصورة صحيحة بدون خطأ . 2- يتعلم الطالب ماهو الاسعاف وما هية واجباته اتجاه المريض . 3- يتعلم الطالب كيف يتعاون مع طب طوارئ المستشفى .
استراتيجيات التيسير المستخدمة	وسائل الابضاح كالسبورة والشاشة الذكية والزيارات الميدانية للمستشفيات
المهارات المكتسبة	يتعلم الطالب كيف يسعف المريض او المصاب وفق الضوابط والشروط
طرق القياس المعتمدة	الامتحانات

Pre-test :

Q1: What do you know about the term "First Aid"?

Q2: Have you ever encountered a situation where an injured person required you to intervene and provide first aid?

Introduction to First Aid and Emergency Medicine



Definition of First Aid

Immediate temporary care given to an injured or suddenly ill person aimed at:

- **Saving lives** (e.g., cardiac arrest)
- **Preventing worsening** (e.g., stopping bleeding)
- **Promoting recovery** (e.g., wound dressing)

First Aid vs Emergency Medicine

First Aid

Immediate care until professionals arrive

Provided by trained laypersons

Focuses on basic interventions

Emergency Medicine

Specialized hospital care

Provided by doctors/paramedics

Includes advanced diagnostics/treatment

2. Importance of First Aid

- Reduces deaths during the "Golden Minutes" (first 10 minutes)
- Prevents complications (e.g., spinal cord damage)
- Builds community resilience.

Statistic:

70% of accident-related deaths could be prevented with first aid.

(Graph: Survival rates with/without first aid)

3. First Responder Qualities

- Stays calm under pressure
- Knows fundamental principles
- Communicates effectively
- Maintains medical ethics

Responsibilities:

1. Secure the scene
2. Call emergency services (911/local number)
3. Provide prioritized care

(Image: Responder calling EMS while assisting)

4. Emergency Assessment (ABCDE)

Systematic approach:

- **A (Airway):** Ensure open airway
- **B (Breathing):** Check breathing
- **C (Circulation):** Check pulse/bleeding
- **D (Disability):** Assess consciousness
- **E (Exposure):** Examine for hidden injuries

(Image: ABCDE step-by-step guide)

5. First Aid Kit Contents

Essentials:

- Sterile dressings
- Gauze pads
- Adhesive bandages
- Latex gloves
- Scissors/tweezers
- Antiseptic solution

(Image: Open first aid kit)

6. Handling Emergencies

A. Severe Bleeding

1. Apply direct pressure
2. Elevate injured limb

3. Use tourniquet if needed

(Image: Controlling bleeding with pressure)

B. Burns

- **Minor burns:** Cool with running water
- **Chemical burns:** Flush with water

(Image: Treating first-degree burn)

7. CPR and AED Use

Adult CPR Steps:

1. Check responsiveness
2. Call emergency services
3. Begin chest compressions (100-120/min)
4. Give 2 rescue breaths after 30 compressions

Post-test :

Q1: What is the definition of first aid?

Q2: What are the duties of a paramedic?

Q3: What are the characteristics of a paramedic?

Q4: What is emergency medicine?

رقم المحاضرة: 2	
عنوان المحاضرة:	مكونات نظام EMS والإدارة والسياسة والتنظيم والمعدات
اسم المدرس:	م.م أسماء عبد الحق محمد
الفئة المستهدفة :	المستوى الأول / الفصل الدراسي الثاني
الهدف العام من المحاضرة :	تعليم الطالب ماهو EMS والمعدات اللازمة للاسعافات
الأهداف السلوكية او مخرجات التعلم:	1- يتعلم الطالب ماهو مصطلح EMS 2- يتعلم الطالب عن كيفية القيام بالاسعافات بالادوات والمواد الموجوده ضمن مكونات EMS .
استراتيجيات التيسير المستخدمة	وسائل الايضاح والزيارات
المهارات المكتسبة	ان يتحلى الطالب بصفات المسعف بعد التعرف عليها
طرق القياس المعتمدة	الامتحانات

Pre – test :

Q1: What is the definition of first aid?

Q2: What are the duties of a paramedic?

Introduction: What is EMS

Emergency Medical Services (EMS) is not just an ambulance. It is **an integrated and coordinated system** designed to provide urgent medical care in the pre-hospital setting and transport the patient to an appropriate medical facility.

Formal Definition (according to NHTSA): "Emergency Medical Services (EMS) is a coordinated system of healthcare practitioners and institutions that provide organized emergency medical care to the community."

Your Role: As future EMTs, you are the **beating heart** of this system. You are the eyes, hands, and brain that deliver care in the field.

The Primary Goal: To preserve life, prevent further harm, and promote recovery through rapid and professional intervention.

(2) Core Components of the EMS System

To function effectively, the EMS system relies on several integrated components:

1. Administration (The Organizational Framework):

- Manages finances, payroll, and scheduling.
- Oversees the procurement and maintenance of equipment and vehicles.
- Handles human resources (recruitment, training, evaluation).

2. Policy and Legislation (The Legal Framework):

- **Scope of Practice (SOP):** Legally defines the procedures, actions, and processes that a healthcare practitioner is permitted to undertake. This varies by certification level (e.g., EMT-Basic, Advanced EMT, Paramedic).
- **Good Samaritan Laws:** Provide legal protection to individuals who provide reasonable assistance in good faith during an emergency.
- **Consent:**
 - **Expressed Consent:** Required from a conscious, mentally competent patient.
 - **Implied Consent:** Assumed for an unconscious or incapacitated patient in a life-threatening situation.

3. Communications Center (The Nerve Center):

- Receives emergency calls (e.g., via 911).
- Dispatches the closest and most appropriate EMS unit based on the nature and priority of the incident.
- Serves as the first link in the Chain of Survival.

4. Clinical Protocols (Your Operational Guide):

- Standardized, written guidelines that dictate the assessment and treatment for specific medical conditions and traumatic injuries (e.g., myocardial infarction, stroke, trauma).
- Ensure consistent, evidence-based, and safe patient care regardless of the provider.

5. Hospitals (The Definitive Care Destination):

- Provide specialized care and resources not available in the pre-hospital setting.
- Effective communication with hospital staff is crucial for seamless patient transfer.

(3) Equipment and Tools: Your Arsenal in the Field (Practical Section)

This section is the core of your practical work. Equipment is categorized as follows:

A. Personal Protective Equipment (PPE) - Your Safety First!

- **Gloves:** Latex, nitrile, or vinyl. Single-use only.
- **Protective Goggles:** Shield eyes from splashes and blood.
- **Masks:** Surgical masks or N95 respirators for protection against airborne pathogens.
- **Gowns:** Used in situations with significant bleeding or bodily fluids.
- **Hand Sanitizer:** To be used between every patient contact.

B. Primary Assessment Equipment

- **Sphygmomanometer and Stethoscope.**
- **Pulse Oximeter:** Attaches to a finger to measure blood oxygen saturation (SpO₂).
- **Glucometer:** Measures blood glucose levels.
- **Penlight:** Used for pupil response assessment and examining the throat.
- **Thermometer.**

C. Basic Life Support (BLS) Intervention Equipment

- **Airway Management Kit:**
 - **Nasopharyngeal Airway (NPA) and Oropharyngeal Airway (OPA):** Used to maintain a patent airway.
 - **Suction Unit:** Manual or electric to clear secretions and vomit from the airway.
 - **Nebulizer:** Administers medication via inhalation.
- **Resuscitation Kit:**
 - **Automated External Defibrillator (AED):** Analyzes heart rhythm and delivers a shock if necessary.
 - **Face Shield or Pocket Mask:** Provides a barrier for safe rescue breathing.
- **Bleeding and Shock Control:**
 - Bandages, gauze, adhesive tape.
 - Elastic (compression) bandages.
 - **Trauma Dressing:** Large, bulky dressings for controlling severe hemorrhage.
- **Immobilization Equipment:**
 - **Cervical Collar (C-Collar):** Various sizes (small, medium, large) to stabilize the cervical spine.
 - **Long Backboard:** Provides full-body spinal immobilization and extrication.
 - **Kendrick Extraction Device (KED):** A vest-like device for extricating patients from confined spaces (e.g., vehicles) while maintaining spinal alignment.

D. Advanced Life Support (ALS) Intervention Equipment

- **Cardiac Monitor/Defibrillator:**
 - Monitors heart rhythm (ECG).
 - Capable of manual defibrillation, cardioversion, and transcutaneous pacing.

- Measures non-invasive blood pressure (NIBP) and SpO₂.
- **Drug Kit/Medication Bag:** Contains intravenous (IV) fluids, cardiac medications, analgesics, needles, syringes, and IV cannulas.
- **Ventilators:** Provide assisted or controlled mechanical ventilation for patients who cannot breathe adequately on their own.

E. The Ambulance (The Mobile Clinic)

- **Front Compartment (Cab):** For the driver and attending EMT. Contains radio communication and GPS systems.
- **Patient Compartment:**
 - **Stretcher (Ambulance Cot):** Adjustable and portable.
 - **Provider Seats:** Secured seats for providing care during transport.
 - **Organized Shelving and Cabinets:** For storing all medical equipment.
 - **Adequate Lighting and Power Outlets (Inverter):** To power and recharge medical devices.

(4) Golden Principles for Equipment Handling

1. **Familiarization:** Know the location of every item on your ambulance. Practice blind retrieval.
2. **Daily Vehicle/Equipment Check:** Before starting a shift, you must inspect all equipment and ensure:
 - Batteries are charged (for AED, suction, monitor).
 - Medications and consumable supplies are stocked and not expired.
 - All equipment is functioning correctly.
3. **Maintenance:** Report any malfunction immediately. A broken piece of equipment can cost a life.
4. **Safety:** Use PPE at all times. Never reuse single-use consumables.

Post – test :

Q1 - According to the lecture, the EMS system is described as an integrated chain. What are the **five main components** that make up this system, as mentioned in the "Core Components" section?

Q2 - You are performing your **daily vehicle check** at the start of your shift. List **three specific things** you must check regarding your medical equipment to ensure it is ready for a potential emergency, as outlined in the "Golden Principles" section.

رقم المحاضرة: 3

عنوان المحاضرة:	تركيب القلب ووظيفة الدورة الدموية وتصلب الشرايين
اسم المدرس:	م.م أسماء عبد الحق محمد
الفئة المستهدفة :	المستوى الأول / الفصل الدراسي الثاني
الهدف العام من المحاضرة :	معرفة التشريح الداخلي للقلب ودوران الدم
الأهداف السلوكية او مخرجات التعلم:	1- تسمية الأجزاء الرئيسية للقلب (الأذين الأيمن والأيسر، البطين الأيمن والأيسر، الصمامات: التاجي، ثلاثي الشرف، الأبهر، الرئوي). 2- وصف مسار تدفق الدم عبر حجرات القلب الأربع، بدءاً من الدم غير المؤكسج وحتى خروجه كدم مؤكسج. 3- شرح وظيفة الصمامات في منع ارتجاع الدم والحفاظ على اتجاه الجريان الأمام
استراتيجيات التيسير المستخدمة	وسائل الايضاح والزيارات
المهارات المكتسبة	ان يتعرف الطالب عن تشريح القلب ويسعف حالات الذبحه القلبية
طرق القياس المعتمدة	الامتحانات

Pre – test :

Q1 - You are performing your **daily vehicle check** at the start of your shift. List **three specific things** you must check regarding your medical equipment to ensure it is ready for a potential emergency, as outlined in the "Golden Principles" section.

Q2 - According to the lecture, the EMS system is described as an integrated chain. What are the **five main components** that make up this system, as mentioned in the "Core Components" section?

Heart structure, circulatory function, and arteriosclerosis

Structure of the heart: The heart is divided into left and right sides. The two sides shown on a piece of paper are the opposite of what we might expect; Because they are drawn as if someone is facing you from the page. Therefore, chambers (A) and (D) form the right side of the heart, and chambers (B) and (C) form its left side. There are two types of chambers in the heart. There are two thin and flexible atria. The atria receive blood as it enters the heart. There are also two ventricles that have a thick muscular wall. The ventricles pump blood out of the heart. The atria are located near the upper part of the heart, and the ventricles are located near its lower part.

This tells us that the rooms referred to are as follows:

A: Right ventricle

B: Left ventricle

A: Left atrium

D: Right atrium

How does blood circulation work in the human body?

When the heart beats, it pumps blood through blood vessels spread throughout the body, which together with the heart form what is called the circulatory system, or the circulatory system. Blood vessels are flexible tubes through which blood travels back and forth to its destination.

The work of the blood is not limited to carrying oxygen from the lungs and food from its sources to the body, but it also carries with it on the return journey wastes and toxins that must be eliminated, such as carbon dioxide, and what happens here is extremely important for maintaining the vitality and continuity of the work of all parts of the body. To keep the body healthy, strong and sound.

Arteriosclerosis:

Arteries are the blood vessels that carry oxygen-rich blood to the heart and other parts of the body. The term (atherosclerosis) is used when oxidized lipids and fats accumulate on the walls of the arteries. Which limits blood flow to the body's organs. Atherosclerosis can affect any artery in the body, including the arteries in the heart, brain, arms, legs, pelvis, and kidneys. When this happens, various diseases may result, including:

- Coronary heart disease.

- heart attack.
- Carotid artery disease.
- Peripheral arterial disease.
- Chronic kidney disease.
- It also leads to serious problems or even death.

the reason:

It occurs due to the accumulation of fat deposits, cholesterol and other substances in the blood on the wall of the arteries. The exact cause of atherosclerosis is unknown, as studies show that it is a slow and complex disease that may begin in childhood and develop faster with age.

Symptoms:

Symptoms often do not appear in the early stages of atherosclerosis. Symptoms may first appear when exposed to physical or emotional stress (times when the body needs more oxygen). Symptoms depend on which arteries are affected and how much blood flow is blocked:

*1 On the heart: chest pain (angina), cold sweats, dizziness, extreme fatigue, heart palpitations, shortness of breath, nausea, and weakness.

*2 In the legs: Pain, aching, heaviness, or cramping in the legs when walking or climbing stairs are the main symptoms of peripheral artery disease, and they disappear after rest.

*3 In the arteries leading to the brain: problems with thinking and memory, weakness or numbness on one side of the body or face, and vision problems.

*4 In the arteries leading to the kidneys: May cause high blood pressure or kidney failure.

*5 Arteries that supply the intestines: severe pain after meals, weight loss, and diarrhea.

Other symptoms may not be noticed until plaque buildup causes serious problems, so it's important to see a doctor regularly.

Risk factors:

- Getting older.
- Family history of hereditary cholesterol disorder.
- High blood cholesterol levels.
- Lack of physical activity.
- Unhealthy diet.
- hypertension.
- diabetic.
- Overweight or obesity.
- Smoking.

Post – test :

Q1: What is the structure of the heart?

Q2: Explain blood circulation?

رقم المحاضرة: 4

عنوان المحاضرة:	الجلطة القلبية ، العلامات والأعراض وكيفية إسعافها
اسم المدرس:	م.م أسماء عبد الحق محمد
الفئة المستهدفة :	المستوى الأول / الفصل الدراسي الثاني
الهدف العام من المحاضرة :	معرفة الطالب بأعراض الجلطة القلبية وإسعافها
الأهداف السلوكية أو مخرجات التعلم:	1- الخطوة ١ :طلب المساعدة الطبية الطارئة (الاتصال برقم الطوارئ المحلي مثل ٩١١) فوراً كأول وأهم إجراء . 2- الخطوة ٢ :جعل المصاب يجلس أو يستلقي في وضعية مريحة (غالباً نصف جلوس مع رفع الركبتين). 3- الخطوة ٣ :مساعدة المصاب على تناول الأسبرين (إذا كان متوفراً وغير ممنوع له) مع التأكيد على مضغه وليس بلعه كاملاً. 4- الخطوة ٤ :طمأنة المصاب وتهنئته وعدم تركه وحده .
استراتيجيات التيسير المستخدمة	وسائل الإيضاح والزيارات
المهارات المكتسبة	يتعلم الطالب كيفية الإسعاف واستخدام أدوات الإسعاف المناسبة .
طرق القياس المعتمدة	الامتحانات

Pre – test :

Q1: What is the structure of the heart?

Q2: Explain blood circulation?

Heart Attack (Myocardial Infarction)

Causes:

Heart attacks occur due to a blockage in the heart that prevents blood and oxygen from reaching it. The blockage can be in the form of a narrowing in the artery, a blood clot (thrombus), an embolism, or a muscle spasm. Heart attacks can be fatal. They are one of the leading causes of death in the United Kingdom. A **cardiac arrest** is when the heart stops, but a **heart attack** is when the heart muscle is shocked and damaged; it may stop at any moment.

A major problem is that the casualty often refuses to accept that they are having a heart attack, which delays critical treatment.

Symptoms:

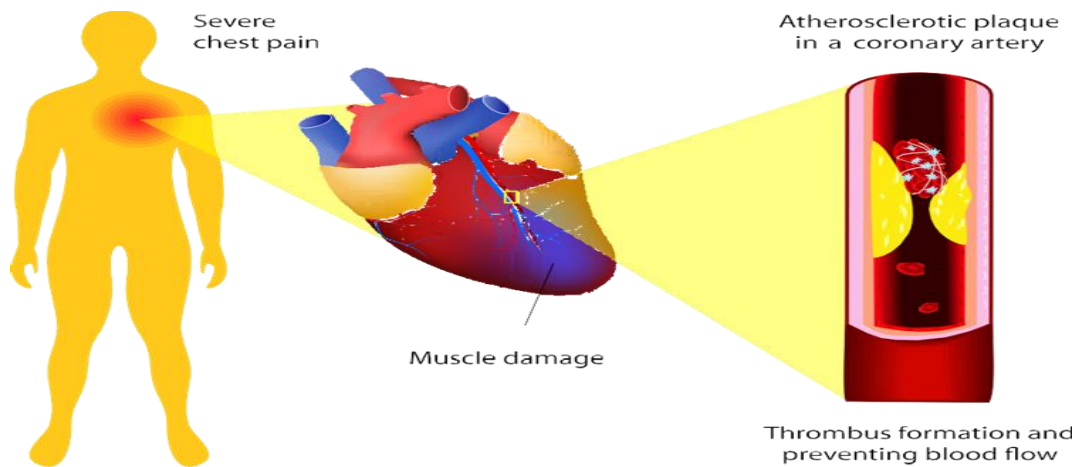
- Severe pain in the centre of the chest, which may spread to the jaw, abdomen, and likely down the left arm.
- Difficulty breathing (shortness of breath).
- Rapid and irregular pulse.
- Nausea and vomiting.
- Pale, cold, and clammy skin.
- Greyish/blue (cyanotic) appearance of the skin.
- A feeling of chronic indigestion or severe heartburn.

Treatment:

1. **Calm the casualty** and place them in a '**W**' position (semi-recumbent position: sitting up at about 45-60 degrees with knees bent). This position eases the strain on the heart.
2. **Call the Emergency Medical Services (EMS)** immediately.
3. **Monitor the casualty's ABCDs** (Airway, Breathing, Circulation, Disability).
4. **Be prepared to start CPR** if the casualty's condition deteriorates and they become unresponsive and stop breathing normally.

Aspirin:

- Give the patient **300mg of Aspirin** tablets to **chew**, not swallow. Chewing allows the medication to be absorbed into the bloodstream much faster.
- As a first aider, you should carry two doses of aspirin safely with you wherever you go. This training course will provide them for you.



Post – test :

Q1- According to the lecture, what is the critical difference between a **heart attack** and a **cardiac arrest**?

Q2- (Symptom Recognition & Treatment):

List **three** common symptoms of a heart attack, as mentioned in the lecture, and describe the correct first-aid positioning for a conscious casualty.

Q3 - (Practical Application - Aspirin Administration):

You are a first aider and suspect a conscious adult is having a heart attack. What is the correct **dosage** and **method of administration** for aspirin, and why is this method important?

رقم المحاضرة : 5+6

الذبحة الصدرية وطرق الإنعاش	عنوان المحاضرة:
م.م أسماء عبد الحق محمد	اسم المدرس
المستوى الأول / الفصل الدراسي الثاني	الفئة المستهدفة :
التعرف على اهم اعراض الذبحة الصدرية	الهدف العام من المحاضرة :
1-يُفرّق بين الذبحة الصدرية المستقرة وغير المستقرة والجلطة القلبية. 2-يُطبق خطة إسعاف أولي من ثلاث خطوات عند التعامل مع نوبة ذبحة صدرية. 3-يُبرر أهمية البدء فوراً في الإنعاش القلبي الرئوي عند توقف القلب. 4-يؤدي ضغوطات صدرية فعالة وفقاً لمعايير الجودة (المعدل، العمق، الارتداد)	الأهداف السلوكية او مخرجات التعلم:
وسائل الابضاح والزيارات	استراتيجيات التيسير المستخدمة
اسعاف مصاب الذبحة الصدرية وتهئية المريض	المهارات المكتسبة
الامتحانات	طرق القياس المعتمدة

Pre – test :

Q1- According to the lecture, what is the critical difference between a **heart attack** and a **cardiac arrest**?

Q2- (Symptom Recognition & Treatment):

List **three** common symptoms of a heart attack, as mentioned in the lecture, and describe the correct first-aid positioning for a conscious casualty.

Angina

An angina attack is not the same as a heart attack. Angina is usually **controlled with medication**, but it can develop into a more serious condition. Angina arises from a buildup of cholesterol in the lining of a coronary artery or within the wall of a damaged artery, making it difficult for blood to flow through to the heart. The episode is often triggered by **physical exertion** or **stress** that the patient is exposed to.

Medication works to **dilate (widen)** the artery walls, allowing blood to flow more easily.

Symptoms:

The symptoms will initially appear **similar to a heart attack**. The patient will experience sudden weakness, anxiety, and fear, and there will usually be evidence of recent physical or emotional stress or exertion.

Treatment:

1. Place the patient in the **same position** as a heart attack patient (semi-recumbent/'W' position).
2. **Locate the patient's specific medication** (usually Nitroglycerin/NTG spray or tablets) and **assist them in taking it**.
3. Often, after administering the medication and resting, the pain will **subside**.
4. **If the pain does not ease**, or if this is the **patient's first ever angina attack**, you must **call Emergency Medical Services (EMS)** immediately.

Risk Factors for Heart Disease

There are many factors that can increase the risk of heart disease. Some can be controlled, and others cannot.

Controllable Risk Factors:

- Smoking
- High Blood Pressure (Hypertension)
- Obesity
- Lack of Exercise / Sedentary Lifestyle

- High Blood Cholesterol
- Uncontrolled Diabetes
- A diet high in fats
- Severe or chronic stress

Uncontrollable Risk Factors:

- Race or Ethnicity
- Family History / Heredity
- Gender
- Age

Important Note on Symptoms in Women:

Women are more prone to experience **shortness of breath**. Their symptoms may resemble a **severe flu** or **extreme fatigue**. Approximately **one in three women** does not suffer from chest pain during a cardiac event.

Signs and Symptoms (Summary):

- Tightness / pressure in the chest (feeling of a "heavy weight")
- Pressure or discomfort that lasts **more than two minutes**
- Nausea
- Sweating and shortness of breath
- Denial (refusing to accept the seriousness of the situation)
- A feeling of general weakness

Treatment Protocol:

1. Upon recognizing the signs of angina, **call emergency services (911) immediately.**
2. If possible, place the patient in a **comfortable position** (typically sitting up).
3. **Do NOT give the patient anything to eat or drink.**
4. Keep the patient calm and reassured.
5. **Be prepared to perform CPR** in case of a cardiac arrest.



Cardiopulmonary Resuscitation (CPR) for Adults

We perform CPR on adults after we have confirmed that the casualty is **unresponsive** and **not breathing normally** (check for more than 10 seconds). If the casualty is not breathing:

1. **Call Emergency Medical Services (EMS)** immediately.

2. **Begin Chest Compressions:**

- **Place the heel of one hand** on the center of the chest (lower half of the breastbone).
- **Place the other hand on top** and interlock your fingers.
- **Position yourself vertically** above the casualty's chest with your arms straight.
- **Press down hard and fast** to a depth of **5-6 cm (2-2.4 inches)**.
- **Rate:** 100 to 120 compressions per minute.
- The compressions should have the **same speed on the downstroke and the release**, and the intervals should be regular.
- **Full chest recoil** (allowing the chest to return to its normal position after each compression) is vital, as it allows the heart to refill with blood.

3. **Rescue Breaths (After 30 compressions):**

- The 30 compressions should be followed by **2 rescue breaths**.
- **Open the airway** using the head-tilt/chin-lift maneuver (tilt the head back and lift the chin).
- **Pinch the soft part of the nose** closed.
- **Take a normal breath**, seal your mouth over the casualty's mouth, and blow steadily for about **1 second**.
- **Watch for the chest to rise** as a sign of effective ventilation.
- **Alternative Methods:** Rescue breaths can also be given mouth-to-nose (if the mouth is injured) or mouth-to-stoma (if the casualty has a tracheostomy tube in their neck).

4. **Continue Cycles:**

- **Do not delay** between rescue breaths and compressions.
- Continue cycles of **30 compressions to 2 breaths**.
- **Minimize interruptions:** Pauses for rescue breaths should be brief, no longer than **5-10 seconds** to avoid delays in chest compressions.
- It is crucial to **maintain the pumping of oxygen-rich blood** to the entire body; this is why chest compressions are extremely important.

5. **Do not stop** until:

- Emergency services arrive and take over.
- An Automated External Defibrillator (AED) is ready to use.
- The casualty shows signs of life (e.g., starts breathing normally).
- You become exhausted and cannot continue.

Handing Over CPR to the Next Rescuer

Performing CPR can be exhausting, and its effectiveness decreases as you become fatigued. It is best to **share the rescue effort** with another person if possible. The other person does not necessarily need to be a trained first aider, as you can instruct them on what to do.

The current rescuer should **verbally guide** the next person on what to do while continuing chest compressions. For example:

1. The first rescuer continues compressions and gives instructions.
2. The second rescuer prepares to take over, often during the pause for rescue breaths.
3. After the breaths, the first rescuer moves away, and the second rescuer **immediately takes over compressions**.
4. This process continues.

It is good practice to **switch rescuers approximately every two minutes** to prevent fatigue and maintain the quality of compressions. If you become exhausted and there is no one to help you, **focus only on chest compressions** and omit the rescue breaths until help arrives or you can continue.

Hands-Only CPR (Compression-Only CPR)

Hands-only CPR helps encourage bystanders who are **reluctant or unwilling** to perform mouth-to-mouth rescue breathing. Many people hesitate to provide

rescue breaths; this is a major reason why people often do not perform any CPR at all.

This technique involves:

- Performing **chest compressions only**, at a depth of **5-6 cm** and a rate of **100 to 120 compressions per minute**.
- There is **no need for rescue breaths**.

How it works:

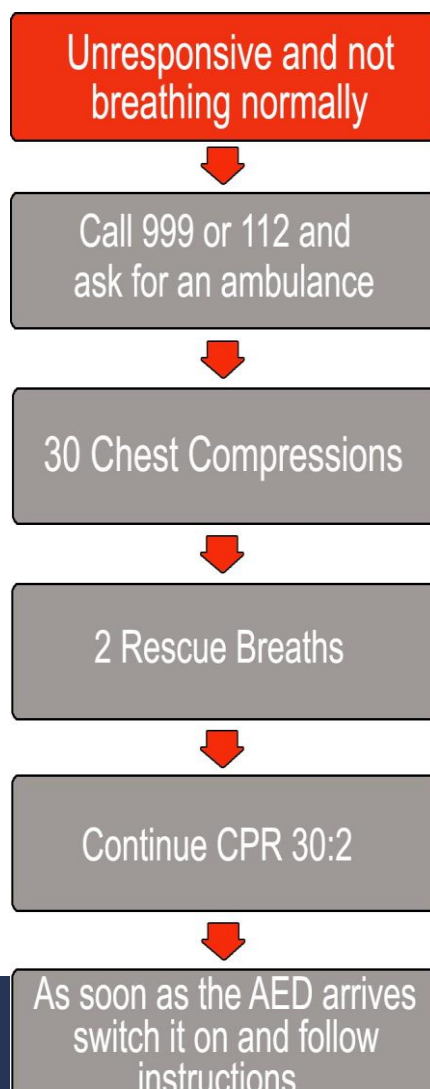
Hands-only CPR helps **activate the circulatory system**, promoting blood flow throughout the body. This blood still contains oxygen, and effective compressions help deliver that oxygen to the vital tissues and organs.

Key Advantage:

It removes the fear of disease transmission associated with the mouth-to-mouth component, making bystanders more likely to help.

Important Note:

It is still highly recommended to **switch with another rescuer every two minutes** to ensure the best possible compression quality is maintained until Emergency Medical Services (EMS) and an Automated External Defibrillator (AED) arrive.





Resuscitation for Children (From 1 Year to Adult)

The thought of resuscitating a child is a very sensitive and worrying matter, let alone having to actually perform it. Children typically need resuscitation due to a **respiratory problem** (e.g., choking, drowning, asthma) more often than a primary cardiac problem, which is more common in adults.

For this reason, the sequence for a child is different. We begin by giving **5 initial rescue breaths** before starting chest compressions.

The CPR Sequence (C-A-B for children):

1. After ensuring the scene is safe, check for responsiveness and breathing.
2. If the child is unresponsive and not breathing (or only gasping):
 - **Give 5 initial rescue breaths.**
3. Then, begin cycles of:
 - **30 Chest Compressions**
 - **2 Rescue Breaths**
4. **Repeat the cycles of 30:2** until:
 - Emergency help arrives and takes over.
 - The child shows signs of life (e.g., starts breathing normally).
 - You become too exhausted to continue.

How to Perform Rescue Breaths:

- Ensure the airway is open using the head-tilt/chin-lift maneuver.
- **Pinch the child's nose** closed.

- Seal your mouth over the child's mouth (or use a face mask if available).
- Blow **gently** for about **1 second**, just enough to make the chest rise visibly.
- Allow the chest to fall fully before giving the next breath.

How to Perform Chest Compressions:

- **Place the heel of one or two hands** on the center of the chest (lower half of the breastbone).
- **Press down straight and hard** to a depth of at least **one-third the depth of the chest** (approximately **5 cm or 2 inches**).
- **Rate:** 100 to 120 compressions per minute.
- Allow the chest to recoil completely after each compression.

Calling for Help:

- If possible, **send a bystander to call emergency services (EMS) immediately.**
- If you are **alone**, perform CPR for about **2 minutes** (roughly 5 cycles of 30:2) **first**, then quickly call EMS yourself using a speakerphone if possible. Return to the child immediately and continue CPR.



Resuscitation for Infants (From Birth to 1 Year Old)

Resuscitating an infant is also very sensitive and a distressing thing to have to do. Like children, infants usually need resuscitation due to a **problem with the respiratory system** rather than a primary heart problem.

The CPR Sequence (C-A-B for infants):

1. After ensuring the scene is safe, check for responsiveness and breathing.
2. If the infant is unresponsive and not breathing (or only gasping):

- **Give 5 initial rescue breaths.**
- 3. Then, begin cycles of:
 - **30 Chest Compressions**
 - **2 Rescue Breaths**
- 4. **Repeat the cycles of 30:2** until:
 - You feel exhausted,
 - Emergency help arrives and takes over,
 - The infant shows signs of recovery (e.g., starts breathing normally), or
 - You are too tired to continue.

How to Perform Rescue Breaths:

- Ensure the airway is open (be careful not to over-tilt the head).
- Seal your mouth **over the infant's mouth and nose** (or use an infant face mask if available).
- Blow **gently** for about **1 second**, just enough to make the chest rise visibly.
- Allow the chest to fall fully before giving the next breath.

How to Perform Chest Compressions:

- **Place two fingers** on the center of the chest, just below the nipple line.
- **Press down straight and hard** to a depth of at least **one-third the depth of the chest** (approximately **4 cm or 1.5 inches**).
- **Rate:** 100 to 120 compressions per minute.
- Allow the chest to recoil completely after each compression.

Calling for Help:

- **If a bystander is present, send them to call emergency services (EMS) immediately.**
- If you are **alone**, perform CPR for about **2 minutes** (roughly 5 cycles of 30:2) **first**, then quickly call EMS yourself using a speakerphone. Return to the infant immediately and continue CPR.

Important Note on Carrying the Infant:

With an infant, you **may be able to carry them carefully** to the phone while continuing compressions. However, **CPR is always best performed on a firm, flat surface**. If you must move the infant to call for help, do so quickly and return to a firm surface to continue effective CPR.

Unresponsive and not
breathing normally



Call 999 or 112 and
ask for an ambulance



Give 5 initial
Rescue Breaths



30 Chest Compressions



2 Rescue Breaths



Continue CPR 30:2



Post – test :

Q1- During infant CPR, how do you correctly form a seal to deliver rescue breaths, and for how long should each breath be delivered to be effective and safe?

Q2 - What is the primary reason the CPR sequence for infants and children begins with **5 initial rescue breaths** before starting chest compressions, unlike the sequence for adults?

Q3 - You are alone and find an unresponsive infant who is not breathing. Describe the correct **depth** and **technique** for performing chest compressions, and explain what you should do about calling for emergency help.

رقم المحاضرة : 7

اسعاف حالات الغرق واستخدام الصعقات الكهربائية	عنوان المحاضرة:
م/ أسماء عبد الحق محمد	اسم المدرس:
المستوى الأول / الفصل الدراسي الثاني	الفئة المستهدفة :
تعلم الطالب عن كيفية اسعاف الغريق واستخدام الصعقات الكهربائية	الهدف العام من المحاضرة :
• يُطبق استراتيجيات الإنقاذ الخمسة مع إعطاء الأولوية لسلامة المنقذ. • يُبرر سبب البدء بضغوطات الصدر قبل التنفس الصناعي في حالات الغرق. • يؤدي إنعاشًا قلبيًا رئويًا فعالاً لضحية غرق مع محاكاة إعطاء النفسين. • يُشغل جهاز AED بشكل صحيح وآمن، مع الالتزام بتعليماته الصوتية. • يدمج بين CPR و AED في سيناريو عملي متكامل كما في الواقع.	الأهداف السلوكية او مخرجات التعلم
وسائل الايضاح والزيارات	استراتيجيات التيسير المستخدمة
معرفة اسعاف الغريق واستخدام الصعقات الكهربائية	المهارات المكتسبة
الامتحانات	طرق القياس المعتمدة

Pre – test :

Q1 - What is the primary reason the CPR sequence for infants and children begins with **5 initial rescue breaths** before starting chest compressions, unlike the sequence for adults?

Q2 - You are alone and find an unresponsive infant who is not breathing. Describe the correct **depth** and **technique** for performing chest compressions, and explain what you should do about calling for emergency help.



First Aid for Drowning Incidents

In most drowning cases, the person does not inhale a large amount of water. Usually, the drowning victim swallows most of the water and often vomits it when resuscitation occurs.

- **Ensure the scene is safe** for you to enter.
- Use the "**quick call**" **approach**: If you are alone, perform about **1 minute of CPR** before going to get help.
- Perform **five initial rescue breaths** before starting chest compressions. The reason for this is that the person has stopped breathing due to a **respiratory problem**, not primarily a heart problem.
- Resuscitation in drowning cases can be **more successful** than in cardiac arrest cases.
- **Secondary drowning** is a problem that can occur hours after a drowning or near-drowning incident; therefore, **always seek medical advice**.

Survival Rates in Cardiac Arrest

Some data on resuscitation has been published by ZOLL Medical. During cardiac arrest:

- Only about **half of the victims will need a shock** from an AED.
- The other half will require **high-quality CPR**.
- The general figure is that for every minute of delay before emergency help arrives, the patient's chance of survival **decreases by 10%**. This figure is based on **no one performing CPR**.
- If **effective CPR is performed correctly**, the chance of survival decreases by only **3-4% per minute**.



To illustrate these numbers, it is assumed that a person has a 100% chance of survival at the exact moment their cardiac arrest occurs. This highlights that

the **effectiveness and speed of resuscitation are critical** for the patient to increase their chance of survival. Therefore, effective training in these skills is essential.

Why We Need Defibrillators (AEDs) and Why They Are Important

The CPR efforts by a first responder are the most important step in saving a patient's life. However, when conventional resuscitation alone is not enough to sustain life, an **Automated External Defibrillator (AED)** is invaluable to the first aider until emergency services arrive.

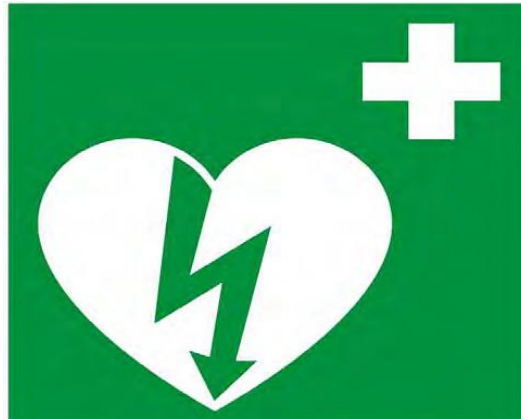
- **Early use of an AED** helps save lives because it works to **restore the heart's rhythm** by passing an electrical current through the heart to stop Ventricular Fibrillation (VF). Often, the heart's beats reorganize and return to their natural rhythm.
- An AED is **incredibly effective and simple to use**; it provides **voice prompts** that tell the rescuer what to do and when.
- Training first aid teams in AED use can **significantly increase** a patient's chance of survival through confident and competent use of the device.

The only problem with AEDs is that **there are not enough of them**. Their cost often discourages companies from purchasing them, but this is changing, and more devices are being placed wherever they are needed.

Survival Rates with AED Access

For approximately every minute an AED takes to arrive, the patient's chance of survival **decreases by 10%**. The ideal goal is to get an AED to the patient **within four minutes**, but this is not always possible if one is not located nearby.

It is **essential to ask** if there is an AED available when calling for help, so that anyone can look to see if there is one that can be retrieved quickly before the emergency team arrives.



The International Symbol for a Defibrillator (AED)

There is a **universal international symbol** for an Automated External Defibrillator (AED), which can be found anywhere the device is located. The symbol may be placed **on the AED's protective case** or **above it**, so it can be **easily seen from a distance**. This symbol is also used on **signs and maps** to direct people to the **location of the nearest AED**.

Post – test :

Q1 – When we use the (A E D) and why is it important ?

Q2 -What are the Survival Rates with AED Access ?



The type of (A E D)

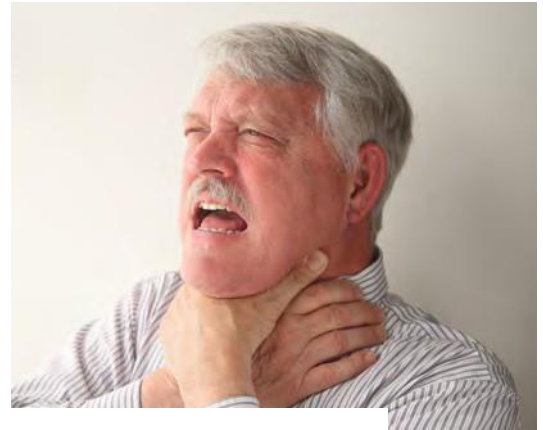
رقم المحاضرة : 8+9

اسعاف حالات الاختناق بوجود وعي للمريض او بدونه	عنوان المحاضرة:
م.م أسماء عبد الحق محمد	اسم المدرس:
المستوى الأول / الفصل الدراسي الثاني	الفئة المستهدفة :
تعلم الطالب كيفية اسعاف الضحية المختنقة بوجود الوعي او عدمه	الهدف العام من المحاضرة :
• يَتَعَرَّف على ثلاثة أعراض على الأقل للاختناق الشديد لدى الشخص الواعي. • يُطَبِّق تسلسل 5ضربات ظهر و 5 دفعات بطنية بشكل صحيح على شخص واعٍ بمحاكاة عملية. • يُغَيِّر التقنية لاستخدام الدفعات الصدرية للحالات الخاصة (كالحمل). • يشرح الإجراء الصحيح عند فقدان المصاب للوعي بدء CPR مع فحص الفم قبل كل نفس .	الأهداف السلوكية او مخرجات التعلم:
وسائل الايضاح	استراتيجيات التيسير المستخدمة
التعرف على الأساسيات المستخدمة لاسعاف المختنق بوجود الوعي او بعدم وجود الوعي	المهارات المكتسبة
الامتحانات	طرق القياس المعتمدة

Pre – test :

Q1 – When we use the (A E D) and why its important ?

Q2 -What is the Survival Rates with AED Access ?



Choking with Consciousness

- **Partial Obstruction** – The casualty can still breathe, but with difficulty. They may be able to speak or cough.
- **Complete Obstruction** – No air can pass to or from the lungs. The casualty **cannot breathe, speak, or cough**.

Ask: "Are you choking?"

- If the person is **unable to breathe or speak**, treat them as follows.
- If they **can speak or cough**, encourage them to **continue coughing** until the object is dislodged. Only call emergency services if the coughing becomes ineffective or the casualty's condition worsens.

Treatment

1. **Call Emergency Services (911)** immediately for an adult or child with a complete obstruction who is unable to cough, speak, or breathe.
2. **For Adults and Children:**
 - Stand behind the casualty.
 - Place one foot between the casualty's feet and the other foot behind you for stability.
 - Deliver **5 back blows**:
 - Lean the casualty forward.
 - Use the heel of your hand to deliver firm blows between the shoulder blades.

- Perform **5 abdominal thrusts (Heimlich Maneuver)**:
 - Place the flat side of your fist just above the casualty's navel (in the midline of the abdomen).
 - Grasp your fist with your other hand.
 - Pull sharply **inward and upward**.

3. **Continue cycles of 5 back blows and 5 abdominal thrusts** until:

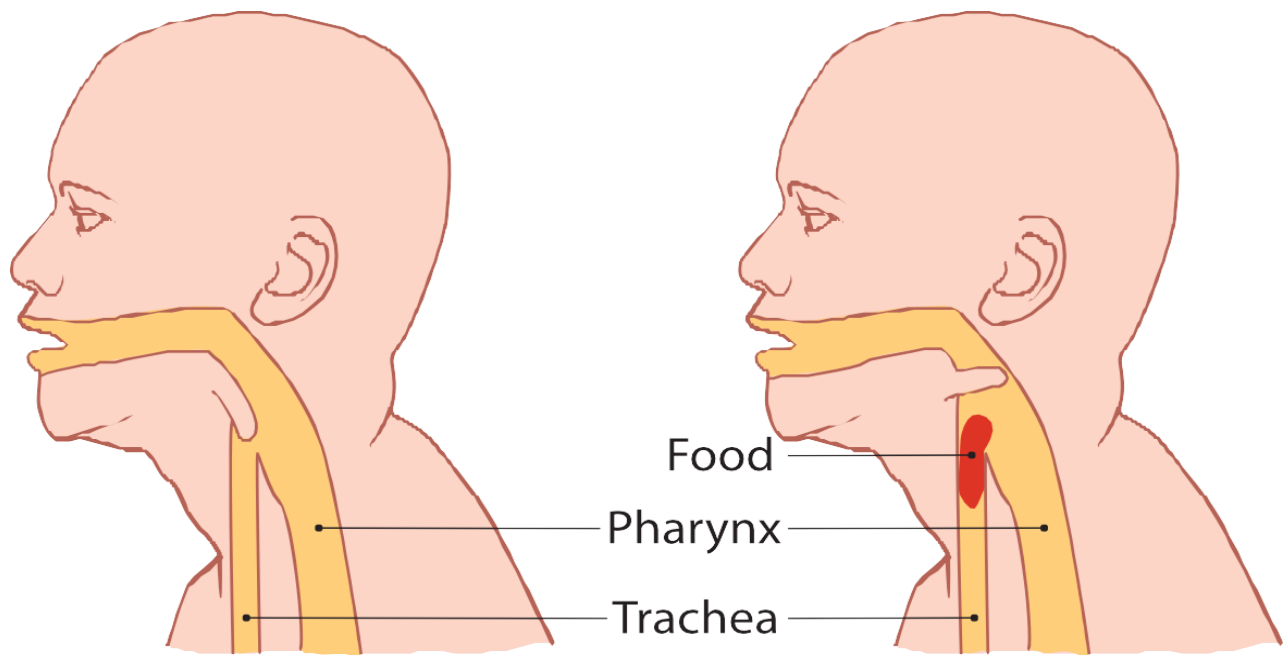
- The object is dislodged.
- The casualty can breathe and cough effectively.
- The casualty **loses consciousness**.

If the casualty loses consciousness:

- **Carefully lower them to the ground.**
- **Begin CPR** immediately (starting with chest compressions). Check the mouth for the object before giving rescue breaths.

Important: Even if the object is successfully dislodged, the casualty **must seek medical attention** afterward, as internal injuries can occur from the procedure.





Infant Choking (Conscious)

- For a conscious infant (under 1 year old) who is choking and cannot cough, cry, or breathe:

Treatment:

1. Position the Infant:
 - Sit down and carefully place the infant face down along your forearm, resting your forearm on your thigh.
 - Ensure the infant's head is lower than their chest to allow gravity to help.
 - Support the infant's head and jaw firmly with your hand, taking care not to compress the soft throat.
2. 5 Back Blows:
 - Use the heel of your other hand to deliver 5 firm back blows between the infant's shoulder blades.
3. 5 Chest Thrusts:
 - After the back blows, turn the infant face up on your other forearm, keeping the head lower than the chest.
 - Place two fingers on the center of the infant's chest, just below the nipple line.
 - Perform 5 quick chest thrusts, pushing down about 1.5 inches (4 cm) deep.

4. Repeat Cycles:

- Continue alternating between 5 back blows and 5 chest thrusts until:
 - The object is dislodged.
 - The infant can breathe, cough, or cry.
 - The infant loses consciousness.

Special Circumstances:

- If the casualty is pregnant or too large to wrap your arms around:
 - Perform chest thrusts instead of abdominal thrusts.
 - Place the heel of your hand in the center of the chest (on the breastbone) and perform sharp thrusts.

Important Notes:

- Never perform abdominal thrusts (the Heimlich maneuver) on a real infant. This can cause severe internal injury.
- Even if the object is successfully dislodged, the infant must seek medical attention afterward. Internal injuries or remaining fragments of the object are possible.

Choking with Unconsciousness

When the person is:

- Unconscious
- Shows no signs of life
- Not breathing
- May have lost consciousness while you were performing back blows or abdominal thrusts.

Treatment:

1. **Call emergency services** if you haven't already done so.
2. If you know the patient is not breathing, **begin CPR**.
3. Perform **30 chest compressions** according to CPR guidelines:
 - **Rate:** 100-120 compressions per minute
 - **Depth:** 5-6 cm (2-2.4 inches)

4. **Check for foreign objects** in the mouth:
 - If something visible is present, remove it with your finger.
 - **Never perform a blind finger sweep** (inserting your finger without looking) to remove any obstruction from the mouth.
5. Attempt **two rescue breaths**:
 - If the first attempt fails to make the chest rise, **re-tilt the head** and attempt rescue breaths again.
 - If the chest still does not rise, **repeat the cycle of chest compressions, re-check the mouth** for any obstruction preventing breathing, and reattempt rescue breaths until the chest rises.
6. After successfully achieving chest rise with rescue breaths, continue with cycles of **30 chest compressions followed by 2 rescue breaths** until:
 - Emergency personnel arrive and take over.
 - Another trained person takes over from you.
 - Signs of life appear in the casualty.
 - The scene becomes unsafe.
 - An AED becomes available.
 - You become exhausted and unable to continue.





Post – test :

Q1: What is the key difference between a partial obstruction and a complete obstruction in a choking casualty?

Q2: Describe the correct procedure for performing abdominal thrusts (the Heimlich maneuver) on a conscious adult.

رقم المحاضرة : 10

اسعاف النزيف	عنوان المحاضرة:
م.م أسماء عبد الحق محمد	اسم المدرس
المستوى الأول/ الفصل الدراسي الثاني	الفئة المستهدفة :
اسعاف الشخص الذي يعاني من النزف	الهدف العام من المحاضرة :
• يُميّز بين النزيف الشرياني والوريدي والشعيري. • يُطبّق تسلسل الإسعاف الثلاثي (الضغط المباشر، الرفع، نقطة الضغط) بشكل عملي صحيح. • يُبرر استخدام الضاغطة (الترنيكيت) كحل أخير فقط ويشرح كيفية تطبيقه. • يُطبّق إجراءات السلامة الشخصية (مثل ارتداء القفازات).	الأهداف السلوكية او مخرجات التعلم:
وسائل الإيضاح والزيارات	استراتيجيات التيسير المستخدمة
يستطيع الطالب التصرف بسهولة في المواقف الصعبة	المهارات المكتسبة
الامتحانات	طرق القياس المعتمدة

Pre – test :

Q1: What is the key difference between a partial obstruction and a complete obstruction in a choking casualty?

Q2: Describe the correct procedure for performing abdominal thrusts (the Heimlich maneuver) on a conscious adult.

First Aid for Bleeding

There are different types of bleeding, and in the following unit, we will learn how to control serious bleeding.

The four main types of bleeding are:

1. **Capillary**
2. **Venous**
3. **Arterial**
4. **Internal**

Your heart pumps blood from one side to the lungs and then returns it from the lungs to the other side of the heart, where it is pumped through the arteries to your organs and capillaries. The blood then returns to the heart through the venous system via the veins.

The types of bleeding can be easily identified by the **color** and the **way the blood flows** from the body

1. Capillary Bleeding

- This is the **least serious** type of bleeding.
- It occurs when blood **oozes** through the skin due to a minor cut or abrasion.
- Capillary bleeding usually stops with **little or no effort** and can be easily controlled by cleaning the wound and applying a gauze or bandage if necessary.

2. Venous Bleeding

- It can be recognized by a **steady, non-spurting flow** of **dark red** blood.
- Its color is dark red because it contains a **low level of oxygen** as it returns to the heart.
- It is considered **serious bleeding**.

3. Arterial Bleeding

- This is the **most dangerous and serious** type of bleeding.
- The blood is **bright red** in color and **spurts or pulses** out of the skin (often in time with the heartbeat).
- Its color is bright red because it is coming directly from the heart and lungs and is **rich in oxygen**.

4. Internal Bleeding

- It can occur for various reasons, including trauma or illness.
- It can be identified by **bruising and signs of impact** (e.g., after a car accident or a fall).
- Controlling internal bleeding will **require calling emergency services**.

- First aid treatment for internal bleeding is the same as for **treating shock** (which will be covered later). This includes keeping the casualty calm, warm, and lying down until help arrives.



Controlling Serious Bleeding

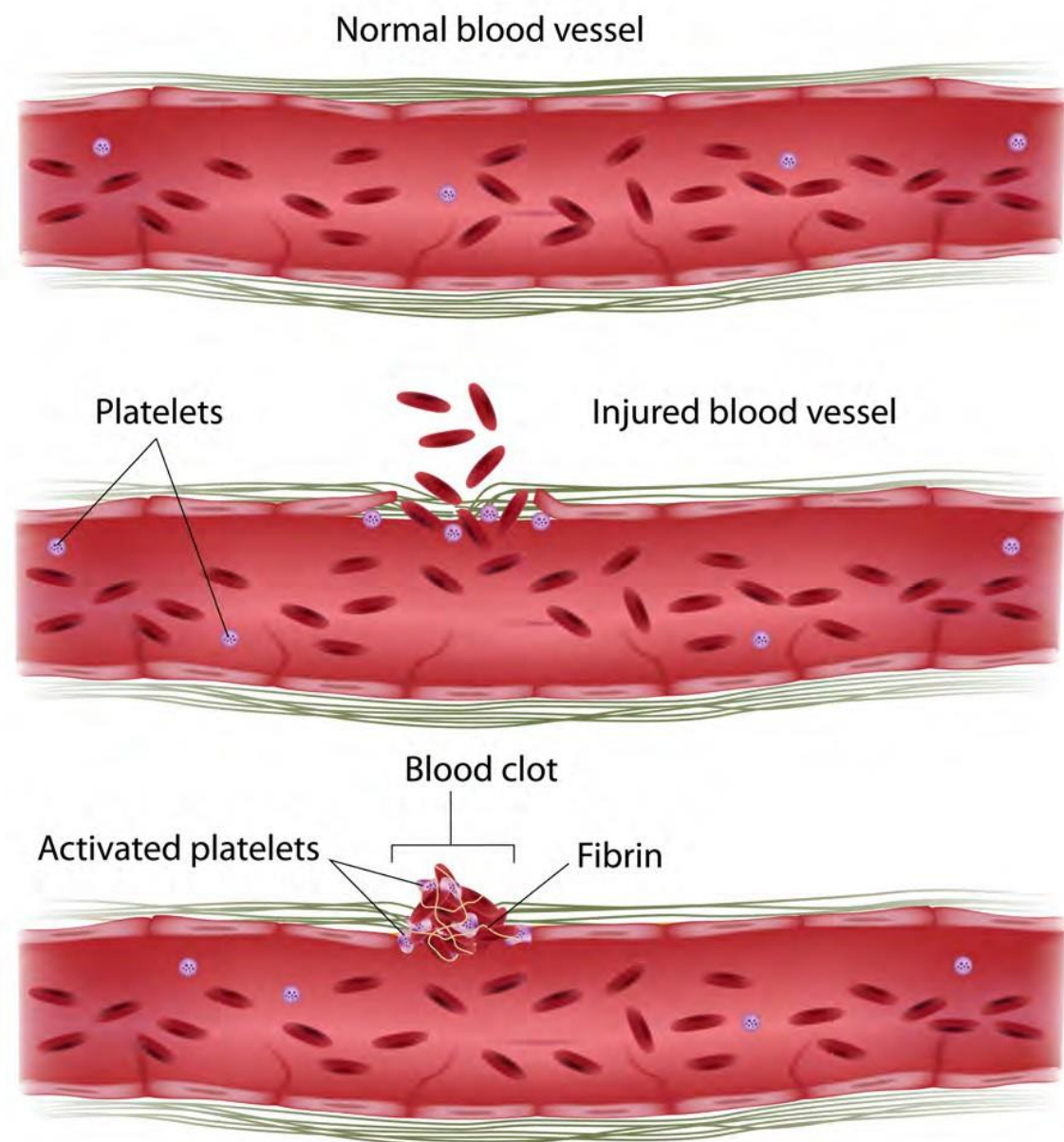
- Wherever possible, ask the patient to apply **direct pressure** to the wound while you put on gloves.
- **Direct pressure** on the wound will reduce blood loss and can be applied using a hand or a cloth pad.
- Examine the wound and locate the **exact source** of the bleeding, then call emergency services.
- Use direct pressure by applying a piece of gauze or a pressure bandage.
- Start from the point **farthest from the heart** and bandage **towards the heart**.
- If blood **soaks through** the bandage, place another cloth pad on top and apply pressure over it.
- If blood continues to soak through the **first and second** layers, **remove both** and start again, ensuring that pressure is applied **directly to the exact point of bleeding**.
- If only a **small amount** of blood is seeping through, it may not be necessary to remove the bandage and reapply pressure.
- Place the injured limb **slightly elevated above the level of the heart** to help reduce bleeding.

A Note on Pressure Points:

- Pressure points are locations where you can compress an artery against a bone.
- In the past, using pressure points was advised as it could slow bleeding.

- However, according to the **2015 ERC (European Resuscitation Council) guidelines**, their use is **no longer recommended** as an effective method for controlling life-threatening bleeding. The primary and most effective method remains **direct pressure** on the wound itself.

How the Body Stops Bleeding



Post – test :

Q1: How can you visually distinguish between venous bleeding and arterial bleeding?

Q2: What are the four main types of bleeding, and which one is considered the most dangerous?

رقم المحاضرة : 11

اسعاف مصاب السكري	عنوان المحاضرة:
م.م أسماء عبد الحق محمد	اسم المدرس
المستوى الأول / الفصل الدراسي الثاني	الفئة المستهدفة :
معرفة كيفية اسعاف مصاب السكري ان كان ارتفاع او انخفاض السكري	الهدف العام من المحاضرة :
• ان يُفرّق بين أعراض هبوط وارتفاع سكر الدم. • يُطبق قاعدة 15-15 لإسعاف حالة هبوط السكر لدى الشخص الواعي. • يتخذ الإجراء الصحيح) عدم إعطاء anything عن طريق الفم مع الشخص فاقد الوعي. • يشرح الإجراء المناسب لارتفاع السكر (التحقق، الدواء، الماء .	الأهداف السلوكية او مخرجات التعلم:
وسائل الايضاح والزيارات	استراتيجيات التيسير المستخدمة
يستطيع الطالب التصرف بسهولة في المواقف الصعبة	المهارات المكتسبة
الامتحانات	طرق القياس المعتمدة

Pre – test :

Q1: How can you visually distinguish between venous bleeding and arterial bleeding?

Q2: What are the four main types of bleeding, and which one is considered the most dangerous?

First Aid for a Diabetic Emergency

Diabetes is a condition that occurs due to a significant increase in blood glucose levels because the body cannot use glucose properly. Glucose comes from the digestion of foods and drinks containing carbohydrates and is also produced in the liver. Carbohydrates come from many different sources, including starchy foods such as bread, potatoes, beans, fruits, dairy products, sugar, and other sweet foods.

Insulin is vital for life. It is a hormone produced by the pancreas that helps glucose enter the cells, where it is used as fuel for energy so we can work, play, and generally live our lives.

Signs and Symptoms:

- Change in level of consciousness
- Change in personality
- Irritability
- Weakness
- Dizziness
- Difficulty breathing
- Cold skin
- Unconsciousness

1. Type 1 Diabetes

- Occurs due to the body's failure to produce insulin.
- Usually requires the person to monitor blood sugar levels daily and take insulin injections to manage their condition.
- Type 1 accounts for **10%** of diabetes cases.

2. Type 2 Diabetes

- This type occurs due to the cells' inability to use insulin properly (insulin resistance).
- Sometimes this occurs alongside insufficient insulin production.
- Type 2 is the **most common form** and can affect people in later life.
- It can be managed through **diet and medication**.

Hyperglycemia (High Blood Sugar)

- **Call emergency services.**
- If the casualty is unconscious, place them in the **recovery position**.

Hypoglycemia (Low Blood Sugar)

- Help the casualty sit down and give them something sugary to drink or eat, like sweets.
- Monitor the patient and reassure them.
- Call emergency services if symptoms persist.
- If the patient is unconscious, place them in the **recovery position**.
- Monitor the **ABCs** (Airway, Breathing, Circulation).
- If the patient is suffering from low blood sugar, give them **15-20 grams of glucose** (e.g., glucose gel, tablets, or a sugary drink).

Statistics:

- Currently, there are over **2 million people** diagnosed with diabetes in the United Kingdom.
- **2 million** suffer from Type 2 diabetes.
- Over **half a million people** have Type 2 diabetes but are **unaware of it**.

Post – test :

Q1: What is the primary role of insulin in the body?

Q2: List four common signs or symptoms of a diabetic emergency.

Q3: What are the two main management strategies for Type 2 diabetes?

رقم المحاضرة : 12

عنوان المحاضرة:	العلامات الجسدية للموت المفاجئ
اسم المدرس	م.م أسماء عبد الحق محمد
الفئة المستهدفة :	المستوى الأول/الفصل الدراسي الثاني
الهدف العام من المحاضرة :	توضيح معنى علامات الموت
الأهداف السلوكية او مخرجات التعلم:	• ان يُفرّق بين مفهومي الموت السريري (القابل للإنعاش) والموت البيولوجي (الدائم). • يَصِف ثلاثًا على الأقل من العلامات الأكيدة للوفاة. • ان يتخذ قرارًا بشأن بدء الإنعاش القلبي الرئوي بناءً على التقييم الأولي (الاستجابة، التنفس، النبض). • يُبرر سبب عدم البدء بالإنعاش عند مشاهدة علامات الوفاة الواضحة) مثل تيبس الجسم أو بقع .
استراتيجيات التيسير المستخدمة	وسائل الايضاح مع عمل مشهد تمثيلي
المهارات المكتسبة	يستطيع الطالب التصرف بسهولة في المواقف الصعبة
طرق القياس المعتمدة	الامتحانات

Pre – test :

Q1: What is the primary role of insulin in the body?

Q2: List four common signs or symptoms of a diabetic emergency.

The signs of death

It is important to recognize the signs that death may be near. At First

What are the presumptive signs of death

1. Decreasing appetite As a person approaches death, they become less active. This means their body needs less energy than it did.,.

A person may completely stop eating a few days before they die. When this happens, it helps to keep their lips moistened with lip balm, so that they are not uncomfortable.

2. Sleeping more In the 2 or 3 months before a person dies, they may spend less time awake.

This lack of wakefulness is because their body's metabolism is becoming weaker.

3. Becoming less social As a dying person's energy levels are reduced, they may not want to spend as much time with other people

4. Changing vital signs

As a person approaches death, their vital signs may change in the following ways:

blood pressure drops

breathing changes heartbeat becomes irregular heartbeat may be hard to detect

urine may be brown,

5. Changing toilet habits Because a dying person is eating and drinking less, their bowel movements may reduce. They may pass less solid waste less often. They may also urinate less frequently.

6. Weakening muscles

7. Dropping body temperature A drop in body temperature may mean there is very little blood flowing to the hands. In the days before a person dies, their circulation reduces so that blood is focused on their internal organs. This means very little blood is still flowing to their hands, feet, or legs.

Reduced circulation means a dying person's skin will be cold to the touch.

8. Experiencing confusion When a person is dying, their brain is still very active. However, they may become confused or incoherent at times. This may happen if they lose track of what is happening around them.

9- Changing breathing

A person who is dying may seem like they are having trouble breathing. Their breathing may suddenly change speed, they might gasp for air, or they may pause between breaths.

10. Hallucination

It is not unusual for a person who is dying to experience some hallucinations or distorted visions.

Other signs of death

After a loved one has died, support from family and friends may help people to cope. If a dying person is attached to a heart rate monitor, those around them will be able to see when their heart has stopped working, meaning that they have died.

Other signs of death include:

1. not having a pulse

2. not breathing
3. no muscle tension
4. eyes remaining fixed
5. bowel or bladder releasing
6. dilated pupil and eyelids partially

Post – test :

Q1: What are two key changes in vital signs that may occur as a person approaches death?

Q2: Why does a dying person's body temperature drop, particularly in the hands and feet?

Q3: Besides a stopped heart (on a monitor), list two definitive signs that death has occurred.

Q4: What are two potential psychological or neurological changes (related to the brain) that a dying person may experience?

رقم المحاضرة: 13

الامراض المعدية	عنوان المحاضرة:
م.م أسماء عبد الحق محمد	اسم المدرس:
المستوى الأول / الفصل الدراسي الثاني	الفئة المستهدفة :
التعرف على الامراض المعدية والوقاية منها	الهدف العام من المحاضرة :
1-تعلم الوقاية من الامراض المعدية 2- تعلم صفات مسببات الامراض وصفاتها كالبكتريا والطفيليات وغيرها 3- معرفة اعراض الامراض	الأهداف السلوكية او مخرجات التعلم:
وسائل الابضاح والزيارات	استراتيجيات التيسير المستخدمة
تعلم طرق الاصابة والوقاية واسرع طرق العلاج	المهارات المكتسبة
الامتحانات	طرق القياس المعتمدة

Pre – test :

Q1: What are the number of symptoms of infectious diseases?

Q2: How many insects transmit the disease?

Infection diseases:

Infectious diseases are disorders caused by small organisms — such as bacteria, viruses, fungi or parasites. Many microorganisms live in or on our bodies. These organisms are usually harmful or beneficial. But under certain conditions, some small organisms may cause diseases.

Symptoms

Each infectious disease has its own signs and symptoms. General signs and symptoms common to a number of infectious diseases include:

fever

Diarrhea

Exhaustion

Muscle pain

cough

Infectious diseases can be caused by:

Bacteria. These single-celled organisms are responsible for diseases such as strep throat, urinary tract infections, and tuberculosis.

Viruses. Viruses, which are smaller organisms than bacteria, cause many diseases ranging from the common cold to AIDS.

Fungi. Many skin diseases, such as ringworm and athlete's foot, are caused by fungi. While other types of fungi can cause infections in the lungs or nervous system. Parasites. Malaria is caused by exposure to a very small parasite that is transmitted by the bite of a mosquito. While some other parasites may be transmitted to humans through animal waste.

Insect bites Some germs depend on disease-carrying insects — such as mosquitoes, fleas, lice or ticks — to move from one host to another. These disease carriers are known as vectors. Mosquitoes can carry the malaria parasite or West Nile virus. Deer ticks may carry the bacteria that causes Lyme disease.

Food contamination

Disease-causing germs can also infect you through contaminated food and water. This transmission mechanism allows germs to spread to many people through a single source. For example, *Escherichia coli* (E. coli) is a bacteria found in certain foods — such as undercooked hamburger or unpasteurized fruit juice.

Follow these tips to reduce your risk of infection:

- wash your hands. This is especially important before and after preparing food, before eating, and after using the toilet
- Receiving vaccinations
- Stay home when you are sick
- Prepare food safely. Keep clean
- Do not share your personal tools with others

Post – test :

Q1: What are the number of symptoms of infectious diseases?

Q2: How many insects transmit the disease?

رقم المحاضرة: 14

عنوان المحاضرة:	الصدمة
اسم المدرس:	م.م أسماء عبد الحق محمد
الفئة المستهدفة :	المستوى الأول / الفصل الدراسي الثاني
الهدف العام من المحاضرة :	معرفة ماهية الصدمة وانواعها
الأهداف السلوكية او مخرجات التعلم:	1-تعلم ماهية الصدمة 2- تعلم انواع الصدمة والامراض 3- تعلم الفرق بين انواع الصدمات
استراتيجيات التيسير المستخدمة	وسائل الايضاح والزيارات
المهارات المكتسبة	تعلم علاج الصدم واسعافها حسب نوعها
طرق القياس المعتمدة	الامتحانات

Pre – test :

Q1: What are the number of symptoms of infectious diseases?

Q2: How many insects transmit the disease?

The shock

Shock is a serious, life-threatening medical condition that occurs as a result of insufficient blood flow throughout the body, which is important for maintaining the health and proper functioning of tissues and organs. Shock is often the result of severe injury or illness. Types of shock

There are four different types of physical trauma.

-Hypovolemic shock

Hypovolemic shock occurs due to a decrease in blood volume in the body.

- heart attack

Cardiac shock occurs when the heart is unable to pump enough blood.

-Obstructive shock

Obstructive shock occurs when a blockage in the cardiovascular system, as in the case of a pulmonary embolism, prevents blood from flowing to the body's tissues and organs.

- Distributional shock

Conditions that lead to disturbances in the functioning of blood vessels can cause vasodilatory shock, whereby when blood vessels lose some of their properties, they can become too wide and elastic to provide sufficient blood pressure to deliver blood to nourish the organs. Causes of shock

Any disorder that affects blood flow through the body can cause shock to the body. Some of the causes that may cause shock include:

- Severe allergic reaction.
- Severe internal or external bleeding.
- Heart problems, such as: cardiac arrest or heart failure.

The occurrence of sepsis in the blood, or what is known as a blood infection.

- Dehydration.
- Poisoning.
- Burns.
- Persistent diarrhea or vomiting.
- Spinal injuries.

Post – test :

Q1: Define shock and its types?

Q2: What is a distributional shock?

رقم المحاضرة: 15

النوبات	عنوان المحاضرة:
م. م أسماء عبد الحق محمد	اسم المدرس:
المستوى الأول / الفصل الدراسي الثاني	الفئة المستهدفة
تعلم الطالب ماهية النوبة وأنواعها	الهدف العام من المحاضرة :
1-تعلم الطالب ماهية النوبة 2- تعلم الطالب وطرق علاج كل واحدة 3- تعلم الطالب اسباب النوبات وطرق تجنبها	الأهداف السلوكية او مخرجات التعلم:
وسائل الايضاح والزيارات	استراتيجيات التيسير المستخدمة
تعلم الطالب طرق اسعاف النوبات بأنواعها	المهارات المكتسبة
الامتحانات	طرق القياس المعتمدة

Pre – test :

Q1: Define shock and its types?

Q2: What is a distributional shock?

Seizures

A seizure is a sudden, uncontrolled electrical disturbance in the brain. It can cause changes in your behavior, movements or feelings, and in levels of consciousness. Having two or more seizures at least 24 hours apart that aren't brought on by an identifiable cause is generally considered to be epilepsy.

Types of seizures

1. Focal (or partial) seizures

Focal (or partial) seizures occur when seizure activity is limited to a part of one brain hemisphere.

2. Generalized seizures

Generalized seizures occur when there is widespread seizure activity in the left and right hemispheres of the brain. The different types of generalized seizures are:

- absence seizures (formerly known as petit mal)
- tonic-clonic or convulsive seizures (formerly known as grand mal)
- atonic seizures (also known as drop attacks)

- clonic seizures

tonic seizures

- myoclonic seizures

Symptoms of seizures

- Staring
- Jerking movements of the arms and legs
- Stiffening of the body
- Loss of consciousness
- Breathing problems or stopping breathing
- Loss of bowel or bladder control
- Falling suddenly for no apparent reason, especially when associated with loss of consciousness
- Not responding to noise or words for brief periods
- Appearing confused or in a haze
- Nodding your head rhythmically, when associated with loss of awareness or loss of consciousness
- Periods of rapid eye blinking and staring

causes of seizure

A seizure can be caused by many things.

These can include:

- An imbalance of nerve-signaling brain chemicals (neurotransmitters)
- Brain tumor
- Stroke
- Brain damage from illness or injury
- Hypoglycemia
- Hyperglycemia
- Hepatic failure
- Renal failure

Seizure first aid

Time the seizure

Time the duration of the seizure

Let the seizure run its course

Keep the person away from hazards

-Move any hazards out of the way Cushion their head

-Make sure nothing hinders their breathing Guide them away from danger (focal seizures)

Don't restrict their movements

-Don't restrain them Don't put anything in their mouth

Stay with them

Reassure them

Stay with them until they have fully recovered After the seizure, put them in the recovery position (if they are on the floor)

Make a record of what happened

Include what happened before, during and after the seizure

Call 999 for an ambulance if...

They have never had a seizure before

They are not breathing or are blue around the lips The seizure lasts more than 5 minutes.

They are not responding after the seizure has stopped

They have sustained an injury during the seizure

Post – test :

Q1: How many types of seizures?

Q2: What are the causes of seizures?

Q3: What are the ways to treat seizures?

المصادر:

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د. نبويه شرف الدين – مدير وحدة إدارة الازمات والكوارث – جامعة طنطا / 2012 .