

## 4.1 Head and spinal injury

concussion	ارتجاج بالمخ
Fluid	سائل
Incident - Accident	حادثة
minor bump	نتوء طفيف (خفيف)
Scalp wounds	جروح فروة الرأس

severe	شديد
Skull fractures	كسر الجمجمة
Sudden swelling or bruising	التورم أو كدمات مفاجئة
unconsciousness	فقدان الوعي
Unintended or Unexpected	غير مقصودة أو غير متوقعة

Knowing how to respond quickly and properly in scene of accident can increase the patient's chances of recovery & it could save their life.

**Different emergencies have different injuries, different symptoms and require different actions**

**emergency** : طوارئ unintended or unexpected incident that requires immediate action

	Head injuries إصابات الرأس
meaning	physical injury to the scalp, skull, or brain. can range from a minor bump on the skull to a severe brain injury.
common injuries	- concussion (type of head injury usually happens from falls, car accidents and sport injuries or object hit hard so brain moves inside skull) - scalp wounds - skull fractures
types of injuries	Open head injuries : injury where object breaks the skull. (common in car accidents) Closed head injuries : injuries which skull not broken by object
Sign & symptoms	Unconsciousness    Unresponsive    Acting sleepy or confused (مرتبك)    Fits or seizures Difficulty speaking or staying awake    Difficulty with coordination (التوازن) & walking Problems with senses (hearing loss, double vision)    Amnesia (memory loss) Blood or clear fluid coming from ears or nose    Vomiting Sudden swelling or bruising around both eyes or behind ears

**Spinal cord** : long thin tube-like bundle of nerves, tissues, and cells

it sends nerve signals from brain to rest of body & it's protected by bones

Spinal cord from brainstem & down to spine bottom    (brain+spinal cord)=central nervous system

**spinal cord injury depends on** severity of injury & which part of spinal cord is affected

	Spinal injuries إصابات العمود الفقري
meaning	damage to spinal cord that blocks communication between brain & body.
common causes	Car accident & Sport injuries    Falls from height    Violence (عنف)    Cancer    Osteoporosis Diving into shallow water (مياه ضحلة)    Multiple sclerosis    Inflammation of spinal cord
symptoms	extreme back pain or pressure in neck, head, or back difficulty with balance & walking    difficulty breathing after injury oddly positioned or twisted neck or back (وضع غريب أو ملتوي في الرقبة أو الظهر) Weakness, lack of coordination or paralysis in any part of body Numbness, tingling or loss of sensation in hands, fingers, feet, or toes



## Emergency medical care for head & spinal cord :

**moving them could cause further damage**

**For spinal injuries, or moderate to severe head injuries, call ambulance straight away if the person:**

become very sleepy      behaves differently      develops a severe headache or stiff neck  
has pupils (dark central part of eye) with unequal sizes      unable to move an arm or leg  
loses consciousness (even briefly)      Vomits more than once

**you should stop any bleeding by pressing clean dressing on wound**

**don't apply pressure to head wound if there's suspected skull fracture**

**Ice can be applied to swollen area of head**

**If person vomiting roll the person's head, neck, and body, as one unit, onto their side to prevent choking ( protects spine which you must always assume is injured in the case of head injury)**

**injuries higher up spinal cord result in more severe effects can result in paralysis**

**paralysis** : loss of ability to move or feel anything in part of body. (شلل)

assume : تفترض      behaves : يتصرف      briefly : فترة قليلة      Choking : يختنق      dressing : ضمادة

pressure : ضغط      pupils : بؤبؤ العين      roll : لف      stiff : تيبس - تصلب      suspected : الاشتباه ب

swollen : متورم      unequal sizes : أحجام غير متساوية      vomiting : تقيؤ      wound : جرح

(ومن يتق الله يجعل له مخرجا)

## 4.2 Stroke

AED	مزيل الرجفان
burst	ينفجر
cells	خلايا
immediately	فوراً

numbness	خدر
supply	إمداد
unresponsive	غير مستجيب
weakness	ضعف

	السكتة الدماغية stroke
meaning	supply of oxygen to the brain is reduced or stops completely (cells in brain begin to die because of not getting oxygen)
caused by	blood clot (blockage of blood flow) or burst in an artery that carries blood to brain
Signs & symptoms	<b>FAST to recognise :</b> Face drooping : one side face droops * numbness in face? * Arm weakness : weakness in 1 or both arms? Speech difficulty : difficult to talk? speech sound different? Time : if yes to any of them person could be having stroke so call emergency services immediately & let operator know that you suspect patient is having stroke
Emergency medical care	If you suspect someone is having stroke: - Call emergency services. Be sure to follow up with them & ask them how long they will take to arrive - Get first aid kit & AED - Take note of time that patient started to experience symptoms, or when you found him - Stay with the person until emergency services arrive & give medical team any details you know about patient - If person become unresponsive & not breathing well be prepared to give CPR



**Treating early can reduce damage caused by stroke, and it can improve their chances of recovery**

Strokes (anyone - anytime)

In UAE between 10,000 - 12,000 people suffer from strokes every year equals to 1 stroke every hour half of them younger than 45 years old

smokers 4 times more likely to have stroke than non-smokers

do exercises, make healthy choices to prevent

In severe stroke 1.9 million brain cells die per minute

If stroke patients get help fast, more likely to survive with little or (no disability بدون إعاقة)



#### 4.3 Diabetic episode

**Diabetes :** سكري **body unable to properly produce or respond to insulin hormone**

who have diabetes often take medication it helps control their blood glucose levels

**diabetic episode happens when person experiences extreme (hypoglycaemia or hyperglycaemia)**

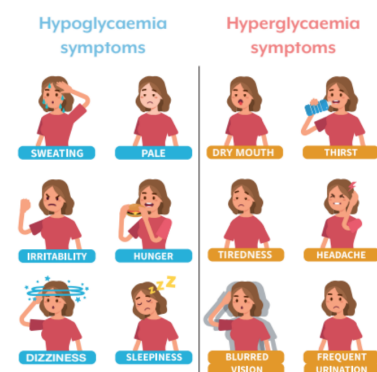
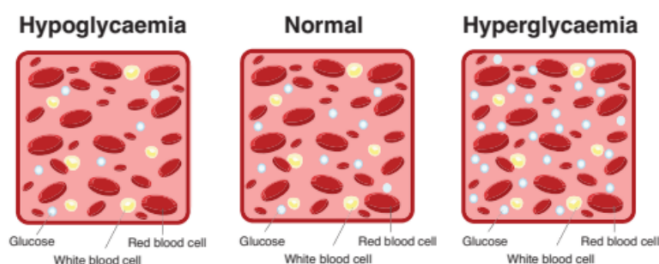
**when body doesn't respond to insulin level of blood glucose becomes too high (hyperglycaemia)**

	Hypoglycaemia (انخفاض السكر في الدم)
happen when person :	main reason: incorrect of insulin medication (take too much at once - take insulin at wrong times)  doesn't eat meal    hasn't eaten enough food    does a lot of physical activity without fueling their body correctly (eating enough)
Signs & symptoms	Dizziness    Feeling hungry    Irritated    Pale skin    Fast heartbeat    Shaking    Sweating    Sleepiness
Emergency medical care	drink sugary juice or eat sugary snack After 15min they should test their blood glucose levels. If hasn't returned to normal it should eat more if person is conscious but unable to eat you should put some honey or sweet syrup in their cheek inside mouth & monitor them If person becomes unconscious, you should call 998 & ask for emergency medical help



	Hyperglycaemia (ارتفاع السكر في الدم)
meaning	when blood glucose levels too high because insulin not present or body doesn't respond to insulin that's present.
main cause :	when person with diabetes doesn't receive insulin treatment or eats too many sugary foods
Signs & symptoms	Increased thirst    Headaches    Blurred vision    Weakness    Need to urinate frequently
Emergency medical care	In most cases, it can be resolved by : Changing dosage of insulin    Eating fewer carbohydrates & sugary foods    Exercising more If blood glucose levels very high or if person has hyperglycaemia for very long time, it can lead to life-threatening complications. If hyperglycaemia symptoms worsen, or if person has problems breathing, very dry mouth, or fruity smell in their breath, they should see doctor

blurred : غير واضح    check : الخد    complications : مضاعفات    dizziness : دوخة    dosage : جرعة  
fuelling : التزود    incorrect : غير صحيح    increased : زاد    irritated : منزعج    pale skin : جلد شاحب  
shaking : اهتزاز    sweating : تعرق    thirst : عطش    urinate frequently : تبول متكرر    worsen : تسوء



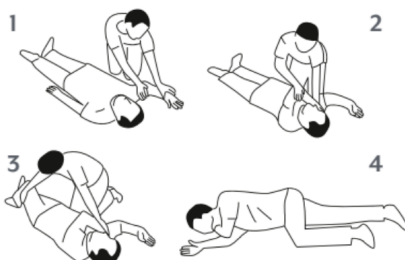
#### 4.4 Seizures

	Seizure نوبات
meaning	disruption in electrical activity in brain It leads to muscle contractions that body cannot control & can cause person to become unresponsive
causes	most common: epilepsy Head injury Lack of oxygen Hypoglycaemia diabetic episode Reaction to medication Cardiac arrest
Signs & symptoms (adults)	Sudden loss of responsiveness Stiff body with an arching back Grey/blue lips Noisy, difficult breathing Sudden uncontrolled movements Loss of bladder or bowel control Saliva at mouth, possible bloodstained if they have bitten their tongue or lip
Emergency medical care	<ol style="list-style-type: none"> <li>1. Make sure casualty protected by clearing away any dangerous objects (Sharp objects, Chairs, hot drinks)</li> <li>2. Make note of time seizure started &amp; continue monitoring time. If you can ask someone else to do it for you</li> <li>3. Place soft padding (rolled-up towel) under casualty's head if you can</li> <li>4. Loosen any clothing around casualty's neck</li> <li>5. <b>When movements stop open casualty's airway &amp; check for breathing</b>  <b>yes:</b> put him in recovery position <b>No:</b> call 998 &amp; be prepared to provide CPR  <b>When someone having seizure Don't do any of this :</b>  <b>Don't</b> hold or restrain casualty <b>Don't</b> move them unless they're in danger  <b>Don't</b> put anything in their mouth  <b>Call 998 for emergency help if :</b>  Causalty's first seizure or repeated seizures cause of seizure unknown  seizure continues for more than 5min unresponsive for more than 10min  injury on another part of body </li> </ol>

	Seizure in young children
Seizure & young children	usually caused by raised body temperature, often following infections. febrile seizure : brain isn't developed enough to cope with body's high temperature
Signs & symptoms	<b>similar to adult seizure but there're some extra warning signs for children :</b> Loss or lack of responsive Strong shaking, with clenched fists & arched back Twitching of face Signs of fever, hot, glowing skin & sweating Squinting, fixed or rolled-back eyes Breath-holding with red face & neck drooling at mouth Vomiting Loss of bladder or bowel control
Emergency medical care	for febrile seizure : same for adult + you should try cool the child down & wait until they've stopped having seizure to remove any bedding & any extra clothing that could help cool them& make sure there's fresh air circulating or use air conditioning for this

arched : مقوس bitten : عض bladder : المثانة blood stained : ملطخ بالدم cardiac arrest : توقف القلب  
casualty : الضحية clenched fists : قبضة محكمة cope : يتكيف CPR : انعاش القلبي الرئوي disruption :  
اضطراب loosen : فك restrain : تقييده saliva : اللعاب Twitching : وخز

#### to place someone into the recovery position.



1. Kneel down beside the casualty.
2. Remove any phones or bulky items from their pockets.
3. Take arm closest to you and put it at a right angle to their body (with their palm facing up).
4. Move the other arm across their chest and put the back of their hand on their cheek.
5. Lift the far knee up until the foot is flat on the floor.
6. While keeping the casualty's hand pressed against their cheek, hold the raised knee, and roll them towards you.
7. Once fully over, re-adjust the head position if needed and place the top leg at a 90° angle.

#### 4.5 Allergic reaction

antibiotic	مضاد حيوي
antibodies	أجسام مضادة
bites & stings	عضات ولدغات
collapsing	ينهار - يسقط
confusion	ارتباك
cough	سعال
diarrhoea	إسهال
dispose	تخلص
dust & pollen	الغبار وحبوب اللقاح
gradually	تدريجياً
hipbone	عظم الورك
immune system	جهاز مناعي

instructions	ارشادات
itchy	حكة
knee	ركبة
needle	إبرة
released	منبعث
Sneezing	عطس
stomach	معدة
thigh	فخذ
throat	حلق
tightness	ضيق
tip	رأس
tongue	لسان

	حساسية Allergy
meaning	immune system mistakes a normally harmless substance as dangerous substance (allergen) (المادة المسببة للحساسية) so Immune system overreacts to allergen by producing antibodies that produce chemicals causing allergic reaction.
more common	in children than adults & most allergies are lifelong, some will go away as child gets older. adults can develop allergies to things they weren't previously allergic to.
Common allergen	dust & pollen animals Insect bites & stings Medicines (antibiotic penicillin) food (nuts, eggs, gluten, shellfish and cow's milk)
Signs & symptoms of allergic reaction	(usually develop within few minutes when it's happened & can develop gradually over few hours)
Signs & symptoms of mild allergic reaction	Sneezing & itchy, runny, or blocked nose Itchy, red, watering eyes Chest tightness, shortness of breath & cough Swollen lips, tongue, eyes, or face Stomach pain, feeling sick, vomiting or diarrhoea

Most allergic reactions are mild (غير قوي) but there are also severe reactions called anaphylaxis

**anaphylaxis affect whole body & it can be life-threatening (حساسية مفرطة)**

symptoms vary depending on allergy & how person contact with allergen

**types of allergic reaction (mild, anaphylaxis)**

Signs & symptoms of anaphylaxis	<p><b>any symptoms of mild allergic reaction + these :</b></p> <p>Swelling of throat &amp; mouth   difficulty breathing   confusion</p> <p>collapsing &amp; losing consciousness   blue skin or lips</p>
medical emergency of anaphylaxis	<p><b>there's 2 types of adrenaline auto-injectors: for adults, for children</b></p> <p><b>Adrenaline auto-injector help to stop allergic reaction &amp; its symptoms.</b></p> <p>If person has adrenaline auto-injector you might help him find it</p> <p>If he is conscious allow him to administer it himself</p> <p>call emergency services if you suspect someone is having severe allergic reaction</p>
Administering adrenaline auto-injector	<ol style="list-style-type: none"> <li>1. Ask the person if he has allergic reaction. if he respond yes ask him if he has adrenaline auto-injector</li> <li>2. help him to find adrenaline auto-injector</li> <li>3. always read instructions on adrenaline auto-injector.</li> </ol> <p>Don't put your hand over tip of injector this were injection released</p> <ol style="list-style-type: none"> <li>4. remove safety cap</li> <li>5. hold person's leg firmly(ثبته) in place. Injection should be given halfway between hipbone &amp; knee</li> <li>6. place tip of adrenaline auto-injector where injection released hard against the person's thigh</li> <li>7. pen should be held in place for an advised length of time (in the instructions). generally, between 3 &amp; 10 seconds</li> <li>8. pull out the auto-injector &amp; take care not to touch the needle</li> <li>9. after injection, rub thigh where injection was administered for about 10s</li> <li>10. take note of all details (time of injection)</li> <li>11. all details should be passed on emergency services when they arrive</li> <li>12. give adrenaline auto-injector that's used to emergency team to dispose of it properly</li> </ol>



**Take allergies seriously, don't take risks**