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#### REVIEW ARTICLE

## First Aid Treatments of Some Common Problems and Diseases

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### **ABSTRACT**

First Aid is the temporary help given to an injured or a sick person before professional medical treatment can be provided. This timely assistance, comprising of simple medical techniques, is most critical to the victims and is, often, life saving. Some common problems, illness, injury or diseases require the first aid treatment at the acute attack or at uncontrollable condition for that person. Any layperson can be trained to administer first aid, which can be carried out using minimal equipments. Certain self-limiting illnesses or minor injuries may not require further medical care past the first aid intervention. It generally consists of a series of simple and in some cases, potentially life-saving techniques that an individual can be trained to perform. The key aim of first aid for common problems is to preserve life, prevent further harm, and to promote recovery of that person.

# Key words: First aid, common treatments, common diseases

### **FEVER**

Fever refers to an elevation in body temperature. Technically, any body temperature above the normal oral measurement of 98.6 F (37 C) or the normal rectal temperature of 99 F (37.2)

C) is considered to be elevated.

Low fever 99.8 °F to 100.8°F

Mild fever 101 °F to 102 °F

Moderate fever 102 °F to 103 °F

High fever 104 °F and above

**Symptoms:** Elevated body temperature, cough, sore throat, fatigue, joint pains or aches, chills, nausea vomiting, lack of interest in eating, dry and hot skin, decreased urine output.

# First Aid:

- First step is to assess the temperature of the person using a thermometer.
- ➤ Take off the excessive or warm clothing of the person.
- ➤ Loosen the tight or restrictive clothing.
- ➤ Allow for good air and ventilation.
- ➤ Provide a tepid sponge bath to the person (tepid means the tap water that is neither too warm nor too cold).
- ➤ Give plenty of the clear fluids to replenish the fluids lost as a result of the heat evaporation.
- > Ensure complete bed rest.

- Apply cold compresses on the forehead if advised by the physician.
- Administer the anti- pyretic over the counter medications such as the acetaminophen or paracetamol. Avoid giving the aspirin drug to the adult or a child.
- Avoid covering the person with the blankets or warm linen.
- ➤ Consult the doctor if the above measures fail to reduce the temperature to the normal and if the fever is accompanied.

# LOW BLOOD PRESSURE (LOW BP)

Blood pressure is the force of blood pushing against the walls of the arteries as the heart pumps. If it is lower than normal then it is called as low blood pressure. A pressure of 120/80 millimeters of mercury (mm Hg) is now considered normal and optimal for good health. If the reading is 90/60 or lower, then it is considered as low blood pressure. The medical term for low blood pressure is hypotension.

**Symptoms:** Sudden weakness, Dizziness or lightheadedness, Palpitations (a rapid, or irregular, heart beat), Lack of concentration, Blurred vision, Nausea (feeling like you are going to be sick) Cold clammy pale skin, Rapid shallow breathing, Fatigue, Depression, Thirst.

#### First Aid

- Make the person lie down. Unconsciousness is the body's way of combating the situation. When you lie on the ground, the gravity acting on your body is comparatively less.
- ➤ Allow for good air and ventilation.
- ➤ Do not make the person get up suddenly; the BP will plummet further.
- ➤ Give the patient plain electrolyte solution or Lemon water with salt.
- Ensure the complete bed rest.

➤ Consult the doctor if the above measures fail to normalize the blood pressure of the person.

## **HIGH BLOOD PRESSURE (HIGH BP)**

Blood pressure is the force of blood pushing against the walls of the arteries as the heart pumps. If it is higher than normal then it is called as high blood pressure. It is repeatedly elevated blood pressure exceeding 140 over 90 mmHg -- a systolic pressure above 140 with a diastolic pressure above 90.

| Category                       | Systolic, mm Hg | Diastolic, mm Hg |
|--------------------------------|-----------------|------------------|
| Optimal                        | <120            | <80              |
| Normal                         | <130            | <85              |
| High normal                    | 130–139         | 85–89            |
| Hypertension                   |                 |                  |
| Stage 1 (mild)                 | 140–159         | 90–99            |
| Subgroup borderline            | 140–149         | 90–94            |
| Stage 2 (moderate)             | 160–179         | 100-109          |
| Stage 3 (severe)               | ≥180            | ≥110             |
| Isolated systolic hypertension | ≥140            | <90              |
| Subgroup borderline            | 140–149         | <90              |

**Symptoms:** Severe headache, Giddiness, Restlessness, Sweating, Stiffening of body, Sudden weakness, Nose bleeds, dizziness, ringing in ears, nausea, flushed face, shortness of breath, blurred or double vision.

#### First aid

- Take deep breaths and practice meditation.
- ➤ Move away from it as soon as possible. Generally, high blood pressure is triggered from a stressful situation.
- ➤ Allow for good air and ventilation.
- Nose bleeds are the body's way of relieving inbuilt pressure. Put ice cold water in the nose and on the person's head to stop it.
- ➤ Give the victim fruit juices (with no salt). These are high in potassium which will help bring the pressure down, albeit to a small extent.
- Ensure the complete bed rest.
- Consult the doctor if the above measures fail to normalize the blood pressure of the person.

#### **HEART ATTACK**

A heart attack is the death of, or damage to, part of the heart muscle because the supply of blood to the heart muscle is severely reduced or stopped. A heart attack occurs when one or more of the coronary arteries that supply blood to the heart are completely blocked and blood to the heart muscle is cut off.

**Symptoms:** Most heart attacks are characterized by pain at the centre of the chest. The pain can be increasingly excruciating. There can also be pain in the neck, shoulders, back and surrounding area. Other symptoms include Perspiration, Sudden weakness, Shortness of breath, Dryness of mouth due to fall in blood pressure.

#### First Aid

- > Do not allow the person to stand up or walk.
- ➤ Loosen the clothing and get them to lie down. Reassure the patient as you call medical help. Reassurance goes a long way.
- Don't ignore the symptoms thinking they will go away.
- ➤ Even if the pain is mild, do not to run, climb stairs or indulge in any such strenuous activity as it will cause further damage.
- ➤ If the person has suffered heart attack before, he/she is likely to have medication (nitrates) handy. These are to be administered by keeping them under the tongue. Nitrates cause dilation of arteries and help relieve pain.
- Do not feed the person anything except the medication.

## **ASTHMA**

This condition is due to inflammation of the air passages in the lungs and affects the sensitivity of the nerve endings in the airways so they become easily irritated. In an attack, the lining of the passages swell causing the airways to narrow and reducing the flow of air in and out of the lungs. It is a disease characterized by recurrent attacks of breathlessness and wheezing, which vary in severity and frequency from person to person. In an individual, they may occur from hour to hour and day to day.

**Symptoms:** Rapid breathing, Difficulty in exhaling, Audible sound from the lungs when breathing, Difficulty in talking, A sweaty face, wheezing, chest tightness, chronic cough.

#### First aid

- Ensure the person is immediately removed from the trigger. It can be pollens, perfume, dust etc.
- ➤ Calm the person and make him/her sit comfortably.
- Allow for good air and ventilation.
- ➤ Make them inhale steam. This moistens the wind pipe and provides relief. Do not add any menthol or balm to the water; it will worsen the condition.
- ➤ If an inhaler is handy, assist him/her to use the same.
- Consult the doctor if the above measures fail to normalize the person.

## **HYPOGLYCAEMIA (LOW SUGAR)**

The condition called hypoglycemia is literally translated as low blood sugar. Hypoglycemia occurs when blood sugar (or blood glucose) concentrations fall below a level necessary to properly support the body's need for energy and stability throughout its cells. Throughout a 24 hour period blood plasma glucose levels are generally maintained between 4-8 mmol/L (72 and 144 mg/dl). Although 3.3 or 3.9 mmol/L (60 or 70 mg/dl) is commonly cited as the lower limit of normal glucose, symptoms of hypoglycemia usually do not occur until 2.8 to 3.0 mmol/L (50 to 54 mg/dl).

**Symptoms:** Weakness, Felling overly exhausted, Feeling irritable and angry, cold and pale skin, numbness around the mouth, apprehension, heart palpitations, emotional outbursts, hand tremors, mental cloudiness, dilated pupils, sweating, fainting.

#### First aid

- ➤ Eat raw sugar, rasgullas, chocolates, or even glucose biscuits.
- Refrain from alcohol and soft drinks until you get your glucose level tested as these dehydrate the body and might worsen the condition
- Follow a diet rich in Vitamin C and Vitamin E.

## FEBRILE FITS/FEBRILE CONVULSIONS

Febrile seizures are, quite simply, seizures caused by fever. They occur in 3-4% of all children. The condition for calling them febrile seizures is that they are associated with fever, and not associated with any disease of the brain or its coverings. The important thing is, they are not a form of epilepsy, and most children prone to febrile seizures do not develop epilepsy. Febrile seizures are triggered off by fever in children between the ages of 6 months and six years.

**Symptoms:** Unconsciousness, Body spasms, jerking limbs, rolling up of eyes, Bladder and bowel incontinence, pale skin and may turn blue briefly.

#### First aid

- ➤ It is important to protect the person from injury. Make him/her lie down on the flat surface, away from sharp objects.
- > Loosen the clothing.
- ➤ Do not try to restrain the person thinking the fits will stop. The spasms will stop eventually.
- ➤ Do not feed them anything not even water until the fits have completely subsided. The food/drink might slip into the windpipe and cause him/her to choke.
- After the fits subside, feed the person glucose syrup or any high-energy liquid, as fits drain out energy.

## **HEADACHE**

Headache is the general term used to describe pain associated with the forehead, skull, neck, temples, and/or face. The pain can be pulsing, steady, abrupt, dull, throbbing, one-sided, or all over. Headache pain is caused by different factors, including blood vessel dilation, muscle tension, and nerve inflammation/irritation. Headache triggers include stress, certain foods, certain beverages, lack of sleep, medications, poor posture, bright or poor lighting, intolerable sounds, and sharp smells.

**Symptoms:** Pain in head, fever, chills, seizures, nuchal or neck rigidity, mental confusion, disturbances in the vision, changes in the level of the consciousness, dizziness.

- ➤ The pain reliever drugs are of most use in reducing the headache.
- The other therapies or measures that you can just use are
  - ✓ Cold application you can apply ice on your forehead or cloth soaked in cold water; this may provide comfort to you.
  - ✓ Moist heat application you can keep a cloth or compress soaked in warm water

- on your forehead and nape of the neck or sometimes a warm shower helps.
- ✓ Relaxation techniques you need to free yourself from the tedious and stressful job for some while in order to relax your mind. For this you can just have a walk to some peaceful and calm place or you can practice concentration exercise.
- > Other ways you can relax yourself are-
  - ✓ Deep breathing exercises
  - ✓ Meditation and yoga
- Acupressure therapy It includes the pressing of the pressure points. You can practise it if you are an expertise in this field or have sound knowledge of the acupressure.
- Medications It includes the use of the pain relieving drugs available as the over the counter drugs.

#### **TOOTHACHE**

Toothache usually refers to pain around the teeth or jaws primarily as a result of a dental condition. In most instances, toothaches are caused by tooth problems, such as a dental cavity, a cracked tooth, an exposed tooth root, or gum disease. However, disorders of the jaw joint (temporo-mandibular joint) can also cause pain that is referred to as "toothache." The severity of a toothache can range from chronic and mild to sharp and excruciating. The pain may be aggravated by chewing or by cold or heat.

**Symptoms:** Pain with chewing, Hot or cold sensitivity, Bleeding or discharge from around a tooth or gums, Swelling around a tooth or swelling of your jaw, Injury or trauma to the area, Foul breathing, purulent or bloody discharge.

### First aid

- ➤ Have your mouth to be rinsed with warm water.
- ➤ Use the dental floss to dislodge any food particles between the teeth.
- The over- the- counter pain reliever drugs can be taken to reduce pain.
- Apply an antiseptic that contains benzocaine directly to the affected tooth and gum; this will reduce the pain sensation temporarily.
- Application of the clove oil may also prove to help.
- Avoid the direct contact of aspirin to the irritated and swollen gum as it may burn the affected area.
- ➤ If the symptoms of the tooth ache persist you should consult your dentist as early as possible.

#### BURN

Burn is injury to tissues caused by the contact with heat, flame, chemicals, electricity, or radiation. First degree burns show redness; second degree burns show vesication; third degree burns show necrosis through the entire skin. Burns of the first and second degree are partial-thickness burns, those of the third degree are full-thickness burns. Four degree burn that extends deeply into the subcutaneous tissue; it may involve muscle, fascia, or bone.

**Symptoms:** Minor burn symptoms includes local burn pain, reddening of skin, skin bleestering, skin peeling, inflammation. A major burn symptom includes burn pain, open wounds, skin loss, fluid loss.

- > Get the person out of burn area or the fire.
- ➤ If the clothes have caught the fire, you can remove that clothes or instantly wrap the patient with the woolen cloth in case of minor burn not the major burn.
- ➤ Cool water may be poured on the burn area or burned area submerged into the cool water; this reduces the oedema and provides transient pain relief. Never directly put ice on the burned areas as it further damages the area.
- Apply the anti biotic like sulpha diazine on the minor or first degree burn.
- After the cold application, you can wrap the burned areas using the sterile gauze bandages; take care to see that it is neither too tight nor too loose. The wounds can thus be protected against the infection. Always keep the burnt area covered.
- ➤ If the chemical burns have taken place, you should splash out the area with appropriate liquids. (Acids diluted with bases.)
- ➤ Better not to remove the clothing that has burned in case of major burn.
- ➤ Major burn patients are prone to go in a state of shock, so it is advisable not to immerse them in the water.
- ➤ Elevate the extremities to reduce the oedema or swelling.
- ➤ Cover the burns areas using sterile gauze bandages, moist clean cloth or gauzes.
- > CPR may be performed if the airway, breathing and circulation has impaired.
- Call immediately any medical emergency assistance or the ambulance.

#### **CORNEAL ABRASIONS**

In our eye, in front of the eyeball there is one transparent and clear layer called cornea. If anything say some foreign bodies fall into the eyes it causes irritation to this thin and transparent film, cornea. Eye injuries most commonly include the corneal abrasions and scratches. Corneal abrasions if left untreated may turn out into the infectious corneal ulcer.

**Symptoms:** Red eye especially at the sclero-corneal junction, excessive lacrimation or tearing will occur, irritation and a sensation of something pricking the eyes is common; it may be followed by pain.

#### First aid

- Firstly rinse your eyes with the saline solution or the clean water. Rinsing the eyes with several times with water may help to remove the foreign body.
- ➤ Blink your eyes several times to facilitate the removal of the foreign substance, if any.
- ➤ Never attempt to put any instrument or any other thing to remove the foreign object. This may further deteriorate the condition.
- Avoid rubbing your eyes following any type of injury to the eyes.
- Seek medical assistance if the foreign body has deeply embedded in the eye and is difficult to remove by any of the above measures.

#### ANAPHYLAXIS / ALLERGY

are persons who are sensitive certain substances; food, pollens, or any other which makes their airway or the immune system hyper responsive. This characteristically refers to the allergic reactions or the anaphylaxis. Sometimes also termed as hypersensitivity, especially in case of the drugs. In many cases the exact etiology or cause may not be found. In simpler terms the anaphylaxis refers to the severe allergic reactions to certain substances that severe respiratory leads distress cardiovascular collapse which may more often, end into death, following the shock.

**Symptoms:** Sudden throat pain, drop in blood pressure or an elevation of the diastolic pressure, laryngeal edema, broncho-spasm, headache, chest tightness, chest pain, respiratory distress, blurred vision, dizziness, sneezing, nausea, vomiting or diarrhea.

## First aid

- Call the ED (emergency department) immediately.
- ➤ Have the person lie on the flat surface; more suitably the floor.

- > Loosen the clothing of the person.
- Elevate the feet of the person.
- ➤ Immediately administer the emergency drug epinephrine to rescue the life of the victim using the auto injector directly injecting the drug into the person's thigh and massaging for 8-10 minutes to facilitate the absorption of the drug.
- ➤ If the person is conscious, and the airway is patent; an oral anti histamine may be administered such as Benadryl (diphenhydramine). Avoid giving, if you feel, it may cause choking.
- ➤ If the person has vomiting or oro pharyngeal secretions, or bleeding; turn the person's face to one side to prevent aspiration and choking.
- ➤ Watch for the chest movements and the respirations of the person. If you find no improvement start the CPR as early as possible.

## **CHOKING**

Choking refers to the blockage of the respiratory passage or the airway by some foreign body, more often due to the food particles. This block in the airway cuts off the supply of fresh air and oxygen which leads to difficulty in breathing and ultimately the respiratory distress occurs. Such events of choking are more pronounced among the children; there occurs the dislodgement of some small foreign objects which creates the trouble to their air passage. If the supply of oxygen is not restored, the brain becomes devoid of the oxygen which may even cause death of the patient

**Symptoms:** Unconsciousness, inability to speak, coughing or gagging, clutching the throat, wheezing, passing out, turning blue, weak cry, weak cough or both.

- ➤ If the victim is verbally responding (can speak), cough, breathe, and stand by it means the foreign body is not interfering much you can direct the person if he understands, to gently force it out.
- ➤ If the victim has difficulty in breathing, speaking, coughing, etc. call the emergency services.
- ➤ If the victim is conscious Practice the "five and five" approach Deliver the first five quick and hard blows on the back of the person in between the shoulders using the heels of the hands.
- Secondly, perform the "Heimlich manoeuvre" i.e. the five abdominal thrusts. Abdominal thrusts can be given as explained below
  - ✓ Position yourself behind the victim.

- ✓ Hold the victim by wrapping your hands around his abdomen. Have the victim to lean forward slightly.
- ✓ With your one hand make a tight fist. Place it slightly above the victim's navel.
- ✓ Now hold that fist with the other hand tightly.
- ✓ Press hard against the victim's abdomen using the tightly grasped fist; with upward thrusts as if you are lifting the person.
- ✓ In this way, perform five abdominal thrusts. If still foreign object is not dislodged, you can repeat the manoeuvre.
- ➤ If the victim becomes unconscious You may need to contact the emergency department and try out certain measures to dislodge the foreign objects.
- Perform the CPR. Do the mouth to mouth respirations to save the person's life.

### FAINTING / SYNCOPE

Fainting is loss of consciousness caused by a temporary lack of oxygen to the brain. Known by the medical term "syncope," fainting may be preceded by dizziness, nausea, or a feeling of extreme weakness. When a person faints while standing for a longer time or due to some or other cause, the loss of consciousness is brief. The person will wake up as soon as normal blood flow is restored to the brain. Blood flow is usually restored by lying flat for a short time. This position puts the head on the same level as the heart so that blood flows more easily to the brain.

**Symptoms:** Nausea, excessive perspiration, giddiness, blurring of the vision, palpitations, numbness or tightening in any body part, confusion, difficulty speaking, loss of movement in arms or legs, vomiting.

#### First aid

- ➤ If you yourself are feeling as if fainting, you can sit down keeping your head in between your knees or lie on your back on the ground.
- ➤ Consult your doctor and describe thoroughly the fainting spell to him.
- ➤ If you see someone having the fainting spell, you can follow certain first aid measures
  - ✓ Have the person sit down or lie on his back on the ground.
  - ✓ Check the airway, breathing and the circulation. Watch out for the breathing by assessing the chest movements, patent airway and coughing (look, listen and feel).
  - ✓ Loosen the constrictive clothing of the person.

- ✓ Restore the blood circulation by elevating the feet above the level of the heart.
- ✓ Provide reassurance to the person becoming conscious.
- ✓ If the breathing is present, help out by restoration of the blood circulation by elevating the legs above the head. If still person does not regain consciousness within few minutes, immediately seek the emergency assistance.
- ✓ Start CPR if needed. Meanwhile have an access to the emergency help.
- ✓ If the signs of the breathing and circulation are absent, and the person does not regain the consciousness, it may indicate some cerebral or neurological pathology immediately call any local emergency number.

## WOUNDS / CUTS / SCRAPES

The term wound refers to any injury or break in the continuity of the skin. Cuts and scrapes are the wounds, which disrupt the skin's integrity. The exposed skin cannot play effective role as the natural barrier; thus it is vulnerable to the infection. Puncture wound is usually caused by a sharp object that pierces through ones skin. It creates a hole when it pierces through. Whenever the injury to skin occurs, the layers of the skin along with the blood capillaries underneath it are damaged resulting in the bleeding. The extent of the tissue trauma and vessel injury determines the type of the wound and the amount of the bleeding

**Symptoms:** Redness, swelling, scratching of that area, pierced object, may or may not bleed, sometimes unbearable pain, crying.

- ➤ The first and foremost priority is stopping the bleeding from the cuts and the scrapes. The minor cuts may not bleed profusely; even if they bleed the bleeding will cease on its own without intervention.
- ➤ Still, if it bleeds, you can gently apply pressure on that site using a clean cloth or pressure bandage for several minutes. (If after applying pressure for a longer time the wounds still bleed, you should seek medical help)
- ➤ Thereafter wash the wound thoroughly with water. Avoid using soap for cleansing as it may irritate the wound. You can use sterilized tweezers to clean the wound and to remove off the debris, if any present in the wound.
- Apply antiseptic or an antibiotic ointment over the wound area. Antibiotic will prevent the

- growth of the micro organisms and thus prevent infection.
- ➤ Cover it using sterile gauze or apply bandage; this will prevent the risk of the infection and keep the wound area clean.
- You need to assess the condition of the wound daily; dressing the wound daily is also of utmost priority to maintain the healthy wound.
- ➤ Observe the wound for redness, swelling, discharge or any exudates that may indicate the infection. If anything like this is observed, you should consult the physician and get medical attention.
- Some cuts or skin injuries that are deep may need to be stitched so seek medical assistance if your wound is deep.
- The doctor may advise you the tetanus shot in case you have deep injury and you haven't received the tetanus shots in last ten years. This will prevent the tetanus infection.

### **DIARRHEA / DEHYDRATION**

Excessive and frequent evacuation of watery faeces, usually indicating gastrointestinal distress or disorder. To most individuals, diarrhea means an increased frequency or decreased consistency of bowel movements. However, researchers have found that diarrhea best correlates with an increase in stool weight; stool weights above 10oz (300 gs) per day generally indicates diarrhea. This is mainly due to excess water, which normally makes up 60-85% of faecal matter.

**Symptoms:** Frequent loose, watery liquid stools, abdominal cramps, Abdominal pain, Fever, Bleeding, Lightheadedness or dizziness from dehydration.

### First aid

- Take the person to the bed to take rest.
- Avoid dehydration by giving lots of clear fluid -- no alcohol or caffeine. Milk will usually prolong diarrhea, but it might help provide nutrients for folks with very mild cases. For moderate to severe cases, use an electrolyte solution like Gatorade or Pedialyte, available to purchase readymade, you can also make your own (Add 1 tsp salt and 5 tsp sugar to 1 litre (2 pints) of water or diluted orange Juice).
- Eat probiotic yogurt. These active cultures can ease the symptoms of some types of diarrhea and shorten their duration.
- ➤ Try the BRAT diet bananas, rice, apples or applesauce, and dry toast. This diet is often suggested for kids, but adults can eat it as well. It's not necessary to restrict kids or adults to this diet, but adding these foods may help shorten episodes of diarrhea.

- Avoid diarrhea medications, unless the doctor tells you to take them. The function of diarrhea is to rid the body of bad bugs. Often the only way to get better is to suffer through the loose stools.
- Consult the doctor if above measures will fail to reduce the diarrhea.

#### **ACIDITY**

Acidity is related to heartburn and gas formation in stomach. In acidity, acid reflux or gastroesopohageal reflux disease, or more commonly known as urdhva gata amalpitta in ayurveda, there is a movement of gastric juices (carrying acid) from the stomach into the lower esophagus (food pipe). This is a condition which is caused when acidic contents in stomach (hydrochloric acid) move upward into the esophagus and making it dysfunctional.

**Symptoms:** Burning pain in your stomach, throat dryness, unbearable stomach pain, coughing, feeling hungry frequently, hours after a meal chest pain, constant pain in the upper abdomen, prolonged heartburn.

- ➤ To reduce the outcomes of heartburn due toacidity, you must maintain your esophagus directly on top of your stomach. The most excellent manner to do it is to sit or stand upright. Do not recline or lay down because the pain develops much more.
- Avoid eating anything while the pain is going on. (You must ensure that when you eat avoid meals that will worsen it. Do not take in food that contains plenty of fats or are oily. You have to get rid also of acidic drinks and fresh fruits.)
- Five a couple of glasses of water are adequate enough to relieve acidity. This way is simple and economical, so you need to try this method first. The actual acid is forced down by the water to your throat as well as weakens the acid in the belly and enables them powerful.
- ➤ Give antacids this will make the base after they are dissolved in drinking water. The direct opposites of acids are the bases. Once the acidity and the base mix, they may counteract each other and changes into a safe water as well as salt.
- ➤ If you do not have any antacid available, you can make use of baking soda as a substitute. Simply mix a tsp of baking soda in a big glass full of drinking water and imbibe it for relief. The mixture may not have a good taste, but it

- takes effect almost instantly. Just remember not to drink too much.
- ➤ Consult the doctor if above measures are failed to reduce acidity.

## FOOD POISONING

Food poisoning occurs when you swallow food or water that has been contaminated with certain types of bacteria, parasites, viruses, or toxins. Most cases of food poisoning are due to common bacteria such as Staphylococcus or Escherichia coli (*E. coli*). Food poisoning more commonly occurs after eating at picnics, school cafeterias, large social functions, or restaurants. One or more people may become sick.

**Symptoms:** Abdominal cramps, Diarrhea (may be bloody), Fever and chills, Headache, Nausea and vomiting, fever, Weakness (may be serious and lead to respiratory arrest, as in the case of botulism), dehydration.

### First aid

- Firstly must control Nausea and Vomiting by avoiding solid foods intake until vomiting ends. Then eat light, bland foods, such as saltine crackers or bread, sipping soda may help prevent vomiting, don't eat fried, greasy, or sweet foods.
- ➤ Don't give or take anti-nausea or anti-diarrhea medication without asking your doctor.
- ➤ Prevent Dehydration by drinking clear fluids, starting with small sips and gradually drinking more. If vomiting and diarrhea last more than 24 hours, drink an oral rehydration solution.
- Call a doctor immediately for diarrhea if lasts more than 3 days, that happens after you eat seafood or mushrooms, accompanied by a fever, with blood or dark stools, with prolonged vomiting that prevents keeping liquids down.

## **BODY ACHE / BODY PAIN**

Body ache or pain occurs due to myalgia means "muscle pain" and is a symptom of many diseases and disorders. The most common causes are the overuse or over-stretching of a muscle or group of muscles. Myalgia without a traumatic history is often due to viral infections. Longer-term myalgias may be indicative of a metabolic myopathy, some nutritional deficiencies or chronic fatigue syndrome.

**Symptoms:** pain in one or more muscles and can be either widespread or isolated to specific areas, such as the arms or legs. Activities like walking or stretching may aggravate muscle soreness. Other symptoms are mood change, insomnia or oversleeping.

#### First aid

- ➤ Allow yourself time to rest.
- Forcing yourself to continue to live as if you aren't in pain is usually going to make things worse.
- ➤ If the body aches are due to strenuous exercise, either do a very light workout until your muscles feel better, or do some other kind of exercise that won't further stress those muscles until they heal.
- ➤ Take an over the counter pain reliever. This will not only help with the body aches themselves, but will aid in reducing the inflammation that might be contributing to the pain.
- Massage can help the muscles to relax and temporarily relieve body aches. Taking a warm bath, or using a heating pad on the area most affected by the aches can also have the same effect.
- Take rest time to time within the work if it persists then consult doctor.

### **BACK PAIN**

Short-term, acute pain in the back of the body that indicates that body is under stress. This is caused due to problems in bones and ligament of spine, muscle and nerve of the back.

**Symptoms:** Pain in the back some time so severe that person unable to sit, stretching the body. Other symptoms are mood change, insomnia or oversleeping.

#### First aid

- Rest in a comfortable position.
- > Apply ice pack to affected area.
- Painkillers or relaxants may be used.
- > Avoid strenuous exercise.
- > Avoid pillows.
- > Avoid sleeping on soft mattress.

#### **VOMITING**

Vomiting is emptying the stomach as a result of strong gagging and retching that leads to throwing up. The stomach's contents are forcefully expelled through the mouth. Vomiting can come in waves as the natural movement (muscle contractions of the digestive system known as peristalses) is reversed, and involuntary contractions in the walls of the stomach and esophagus force the stomach contents out. Nausea is the sensation of being about to vomit. Vomiting, or emesis, is the expelling of undigested food through the mouth.

**Symptoms:** Yellowing of the skin and whites of the eyes, pain in the chest or lower abdomen, trouble with swallowing or urination, dehydration or extreme thirst, drowsiness or confusion,

constant, severe abdominal pain, a fruity breath odor.

#### First aid:

- Reassure the person and advise the patient to take slow and deep breaths.
- ➤ Use a damp cloth to wipe the face of the patient.
- ➤ Hydrate with clear liquids (clear soup, broth, juice, herbal tea) beginning with small sips and increasing to four to eight ounces at a time, or one ounce or less at a time for children.
- Avoid milk and other dairy products that may worsen nausea and vomiting.
- After tolerating clear liquids, begin to eat soft, plain food such as oatmeal and yogurt.
- ➤ Give children oral rehydration solutions such as Pedialyte and Rehydrate available to purchase readymade, you can also make your own (Add 1 tsp salt and 5 tsp sugar to 1 litre (2 pints) of water or diluted orange Juice).
- ➤ Avoid cola, tea, fruit juice, and sports drinks because they don't adequately replace fluid or electrolytes.
- Avoid plain water, as it does not contain electrolytes and can dilute electrolytes in a dehydrated body and cause an imbalance that may lead to seizures.

#### **ACNE**

Acne is a common skin disease characterized by pimples on the face, chest, and back. It occurs when the pores of the skin become clogged with oil, dead skin cells, and bacteria. Localized skin inflammation as a result of over activity of the oil glands at the base of hair follicles. Acne happens when oil (sebaceous) glands come to life around puberty, when these glands are stimulated by male hormones that are produced in the adrenal glands of both boys and girls.

**Symptoms:** Pain, tenderness, itching, swelling, redness or red spots on the skin.

#### First aid:

- ➤ Wash the skin with plain water avoiding the soap.
- ➤ Avoid squeezing of pimples from the skin.
- Drink plenty of fluids, avoid fizzy drinks, give only balance diet.
- ➤ Oatmeal mixed with water and this oatmeal mixture (or turmeric with coriander juice) should be applied like a mask on the affected area for 20 minutes (or wash your face with scrubbing agent).
- ➤ Once you have washed your face with a mild scrubbing agent, use 2 percent salicylic acid solution on your face. This solution is able to

- remove all types of residue left on your skin, including dead skin cells that sooner or later will clog the pores and result in acne.
- ➤ Consult the skin specialist or dermatologist if above measures fails to relieve from acne.

#### **HYPERGLYCEMIA**

Hyperglycemia develops when there is too much sugar in the blood. Fasting hyperglycemia is defined as a blood sugar greater than 90-130 mg/dL (milligrams per deciliter) after fasting for at least 8 hours. Postprandial or after-meal hyperglycemia is defined as a blood sugar usually greater than 180 mg/dL after 1-2 hours after meal.

**Symptoms:** Blood glucose more than 180 mg/dl, increased thirst, headaches, difficulty concentrating, blurred vision, frequent urination, fatigue (weak, tired feeling), and weight loss.

## First aid:

- ➤ Drink more water. Water helps remove the excess glucose from your urine and helps you avoid dehydration. Stay hydrated. Avoid alcohol, tea and coffee, as these can cause dehydration.
- Exercise more helps to lower your blood sugar.
- ➤ Consult your doctor and change the amount, timing, or type of diabetes medications you take. Caution If you have type 1 diabetes and your blood glucose is over 240 mg/dL, you need to check your urine for ketones. When you have ketones, do NOT exercise. If you have type 2 diabetes and your blood glucose is over 300 mg/dL, even without ketones, do NOT exercise.
- Change your eating habits. You may need to meet with the dietitian to change the amount and types of foods you are eating.

### SKIN RASHES / CONTACT OISIONING

A skin rash is an area of inflammation or a change in the color or surface of the skin. A skin rash can result from a variety of irritants or conditions, allergies are one of the more common causes of the skin rash in children. Allergic rashes can be caused by either skin contact with an allergen (allergic contact dermatitis) or as a reaction to an ingested or inhaled allergen. Skin rashes can appear on the entire body or be confined to specific areas. They may or may not be contagious. Most childhood skin rashes are not contagious unless they are caused by an infectious disease such as chicken pox or scabies. Acne vulgaris is the most common skin rash of the pediatric and adolescent population.

**Symptoms:** Redness, swelling, itching, blisters, burning sensation, general headaches and fever.

#### First aid:

- Expose the affected area by removing cloth and jewelry.
- ➤ Keep the skin slightly moisturized with a mild hypoallergenic, odorless moisturizer or apply calamine lotion (helps relieve itching and burning).
- Avoid hot showers and baths as this tends to aggravate the rash.
- Use mild soaps and nonabrasive sponges.
- ➤ Dress in light and breathable fabrics like cotton.
- ➤ Avoid scratching any types of rashes.
- A child with chicken pox should remain indoor and not allowed to go to school or daycare until the last lesion to appear fully crusts over.
- ➤ Whenever the rash is accompanied with fever, seek medical help.

### **CONSTIPATION**

Constipation refers to a decrease in the frequency of bowel movements or difficulty in passing stools. The stool of a constipated person is typically hard because it contains less water than normal. Constipation is a symptom, not a disease.

**Symptoms:** Infrequent bowel movements, straining to have a bowel movement, decreased weight of stool, feeling as though you need to go but can't, the need for an enema, a need for laxatives.

#### First aid

- Drink plenty of water. Water is essential in moving waste matter through the colon. Drinking 6 to 8 8-oz. glasses of water can help prevent constipation.
- ➤ Walking, jogging, swimming and other exercise stimulate the bowel muscle
- ➤ Eat a high fiber diet. Fiber helps to add bulk to stools, making them easier to pass through the bowel. Your diet should include fiber-rich foods such as fruits, vegetables and whole grains.
- Avoid dehydrating liquids such as soda, coffee and tea. Too much alcohol consumption, as alcohol also has a dehydrating effect on the body.
- ➤ Use natural remedies to cleanse your colon. There are products available that are made with natural ingredients, including psyllium husks, and can help to cleanse your colon of built-up waste resulting from constipation.

#### **CONJUNCTIVITIS / PINKEYE**

Conjunctivitis (Pink eye) is a catch-all term used to describe any inflammation of the conjunctiva, a group of membranes that cover the inner lining of the eyelids and the sclera (white part of the eyeball). Conjunctivitis is the inflammation of the delicate membranes around the whites of the eye and is commonly caused by either a bacterial (pinkeye) or viral infection or as a result of allergies. In most cases this condition is not serious and can be treated at home.

**Symptoms:** Tears, swollen lymph nodes, burning, and very itchy eyes, redness, eyes may discharge a heavy sticky pus, eyes may feel gritty underneath the eyelids, blurred vision.

### First aid:

- Wash the eyes with clean plain water.
- ➤ Keep your eyes clean, wash them often and if you use a cloth towel or washcloth, make sure nobody else will use it.
- Apply a warm compress for 5-10 minutes three or four times a day.
- ➤ Instill the 1% chloramphenicol ointment in the eyes or consult the doctor.
- ➤ Your doctor will likely prescribe antibiotics in the form of eye drops or ointments if the conjunctivitis is caused by a bacterial infection. Antibiotics will not help in cases of viral infection.

## **CONCLUSION**

Due to some common problems, illness, injury or diseases at acute condition life of the person or victim is at danger, nearly one third of the people die on their way to hospital or before the arrival of ambulance or the medical assistance. Every second to third person have common problems of sudden hypertension, asthma attack, heart attack, low BP, low sugar convulsions, burn and so on if timely first aid is administered or given to them, their lives can be saved. There is no need to be a doctor to save lives – just do it by learning how to give first aid. There is no need of any equipment, machine or tool. It generally consists of a series of simple and easy steps, in some cases, potentially life-saving techniques that an individual can be trained to perform with minimal equipment. Basic principles, such as knowing to use an adhesive bandage or applying direct pressure on a bleed, are often acquired passively through life experiences. However, to provide effective, lifesaving first aid interventions requires instruction and practical training. This is especially true where it relates to potentially fatal illnesses and injuries.

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