Short question Electrotherapy-1

www.physiotherapyphd.com

Latent Heat

It is the energy required for (or released by) a change of state.
Latent heat of fusion is the amount of heat required to convert 1 gm of ice at 0 degree celsius to 1 gm of water at 0 degree Celsius (value is 336 joules).
Latent heat of vaporization is the amount of heat required to convert 1 gm of water at 100 degrees Celsius to 1 gm of steam at 100 degree Celsius (value is 2268 joules).

Motor Unit Action Potential

The motor unit action potential is the sum of electrical potential of the muscle fibers present in the single motor unit.
The motor unit action potential (MUAP) means when the depolarization of muscle fibres, which results in the electrical activity and graphically recorded by electromyogram, it represents potential derived from group of muscle fibres that are contracting nearly synchronously and are situated fairly close together and frequently activated by a single neuron. The motor unit action potential therefore represents a sample of activity of the fibres of motor unit and its characteristics are influenced by position of electrodes in relation to fibres of unit.

Diathermy

When therapeutic local heating is achieved by introducing some form of energy which is transmitted to the tissue to be absorbed and generate heat during its passage is called Diathermy.
Diathermies types are Short wave diathermy, Microwave diathermy, Long wave diathermy
Current modulation
Current modulation refers to any alteration in the magnitude or any variation in duration of the pulses. Modulation may be continuous, interrupted, burst, or ramped.
The current modulation is an important phenomenon because the physiologic response to the various waveforms depends largely on current modulation. Modulation refers to any alteration in the magnitude or any variation in duration of these pulses. Modulation may be continuous, interrupted, burst, or ramped. According to various treatment goals the parameters of current modulation must be established.

Van't Hoff's Law

Van't Hoff's law states that any chemical change which is capable of being accelerated is accelerated by the rise in temperature. Therefore, all the chemical changes of the body that can be accelerated are accelerated by heat.

Tridymite Formation

In high pressure mercury vapour lamp, the burner is made of quartz the some of the quartz changes to one another form of silica called tridymite due to very high temperature in the burner. It is harmful to the total output of ultraviolet rays as it is opaque to the rays and total output of the lamp gradually decreases as the proportion of tridymite increases at around 1000 hours of ultraviolet rays production that much tridymite can form that the whole burner tube needs to be replaced.

List the factors influencing SD curve

Age of the patient – Faster in younger age group, Site of lesion – Faster when lesion is more proximal to spinal cord, Nature of lesion – Faster following spontaneous regeneration than following nerve suture.