

ASSIGNMENT FOR VIVA DENTAL SECTION A 2nd semester

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Q1. (I) How will you take a blood pressure of hypertensive patient?

(II) what is neuromuscular Junction Draw and label diagram?

- **Ans:1:**
- **High Blood pressure :**
- High blood pressure is a common condition in which the long term force of the blood against your artery walls is high enough that it may eventually cause health problems such as heart disease.
  - Blood pressure is determined both by the amount of blood your hearth pumps and the amount of your hearth pumps and the amount of resistance of blood flow in your arteries the more blood your pumps and the narrows your arteries the higher your blood pressure

○ you can have high blood pressure (hypertension) for years without any symptoms. even without symptoms damage to blood vessels and your hearth continues and can be detected uncontrolled high blood pressure increases your risk of serious health problems including heath attack and strokes. high blood pressure generally develops over many years and it affects nearly everyone eventually. fortunately high blood pressure can be easily detected and once yo can work with your doctor to control it.

- symptoms:
- most people with blood pressure have no signs or symptoms even if blood pressure readings reach dangerously high levels. A few people with high blood pressure may have headaches shortness of breath or nosebleeds but these signs and symptoms aren't specific and usually

don't occur until high blood pressure has reached a severe or life threatening stage

- Primary essential hypertension..
- for most adults there's no identifiable cause of high blood pressure this type of high blood pressure call primary essential. hypertension tends to develop gradually over many years
- Secondary hypertension..
- some people have high blood pressure caused by an underlying condition. this type of high blood pressure called secondary hypertension tends appear suddenly hypertension tends appear suddenly and cause higher blood pressure than does primary hypertension. various conditions and medications can lead to secondary hypertension includes
- obstructive sleep apnea
- kidney problem
- adrenal gland tumors
- thyroid problems

- \*certain defects you're born with congenital in blood vessels
- certain medication such as birth control pills cold remedies decongestants and some prescription drugs
- illegal drugs such as cocaine and amphetamines.
- Complications:
- the excessive pressure on your artery walls caused by blood pressure can damage your blood vessels as well as organs in your body it goes uncontrolled the greater the damage uncontrolled the greater the damage.uncontrolled high blood pressure can leads to complications including
- Heart attack or Stroke :
- high blood pressure can cause hardening and thickening of the arteries atherosclerosis which can lead to a heart attack stroke or other complications
- Aneurysm:

- increased blood pressure can cause your blood pressure vessels weaken and bulge forming an aneurysm if an aneurysm ruptures it can be life threatening.

Ans:2:

... Neuromuscular Junction..:

- Neuromuscular Junction (or myoneural Junction) is a chemical synapse between a motor neuron and a muscle fiber. It allows the motor neuron to transmit a signal to the muscle fiber causing muscle contraction.

Electron micrograph showing a cross section through the neuromuscular Junction. T is the axon

terminal, M is the muscle fiber. The arrow shows junctional folds with basal lamina.

active zones are visible on the tips between.

- At the neuromuscular Junction, the nerve fiber is able to transmit a signal to the muscle fiber by releasing ACH (and other substances), causing muscle contraction.

muscles will contract or relax when they receive signals from the nervous system. the neuromuscular Junction is the site of the signal exchange. the steps of this process in vertebrates occur as follows (1).the action potential reaches the axon terminal. (2)voltage \_depending calcium gates open, allowing calcium to enter the axon terminal. (3).neurotransmitter vesicles fues with the

presynaptic vesicles with the presynaptic membrane and ACh is released into the synaptic cleft via exocytosis (4) ACh binds to post synaptic receptors on the sarcolemma (5). This binding causes ion channels to open and allows sodium and other cations to flow across the membrane into the muscle cell. (6) The flow of sodium ions across the membrane into and potassium ions out of the muscle cell generates an action potential which travels to the myofibril and results in muscle contraction. labels A. motor neuron Axon b. Axon terminal C. synaptic cleft D. muscle cells E. part of myofibril.

neuromuscular Junction diseases can be of genetic and autoimmune origin. genetic disorders, such as Duchenne muscular dystrophy, can arise from mutated structural proteins that comprise the neuromuscular Junction, whereas autoimmune disease, such as myasthenia gravis, occur when

antibodies are produced against nicotinic acetylcholine

receptors on the sarcolemma

Diagram:

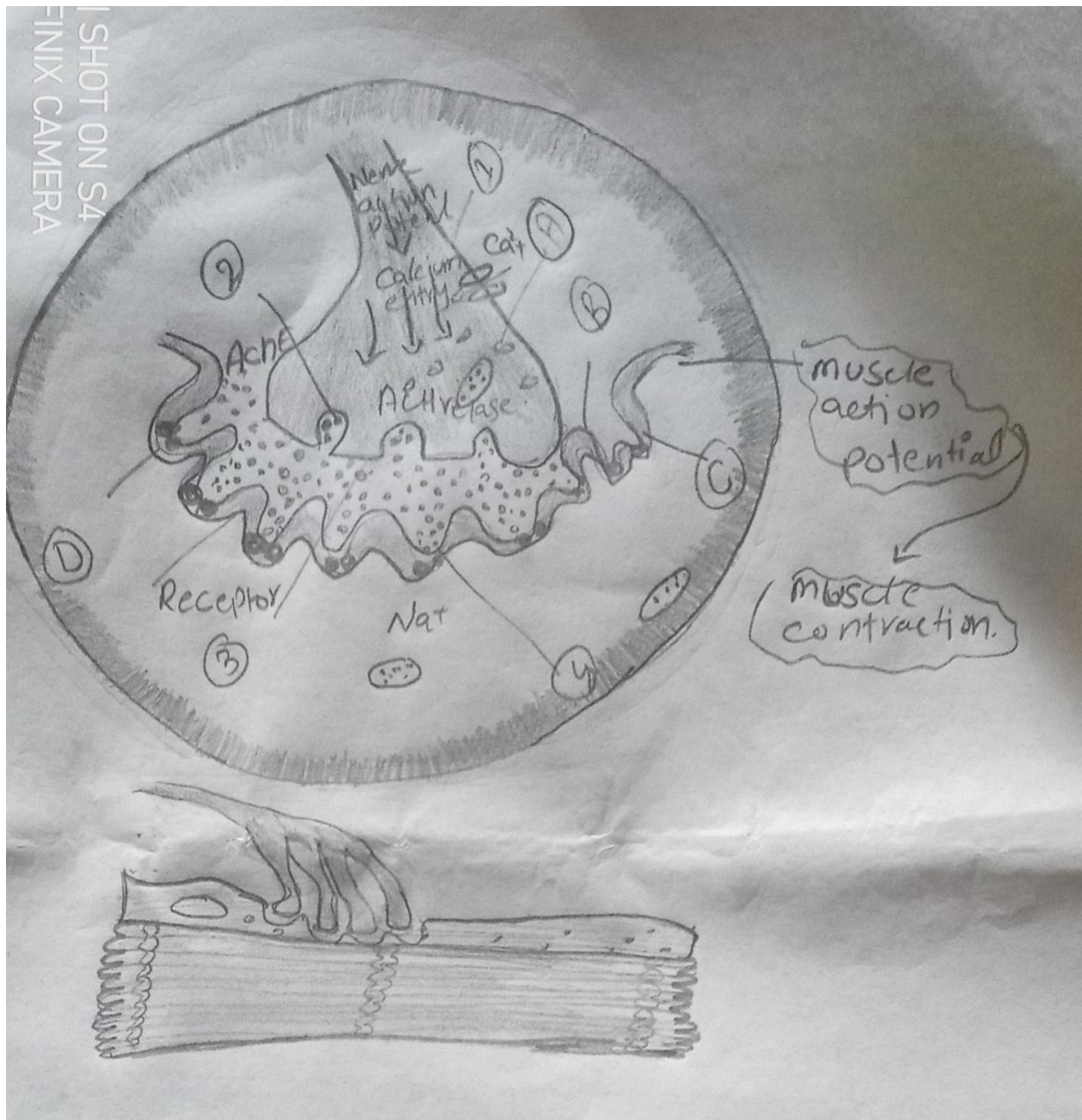




Diagram :

