SUMMARY OF DEATH

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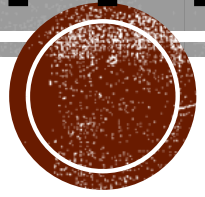


WHAT IS DEATH

Irreversible cessation of life

Phases of death

1- somatic (clinical death)

2- molecular death (cellular death)

) Somatic death is = complete and irreversible cessation of the vital functions of the (brain , heart , lungs

In somatic death (your cells can respond to external stimuli , like pupil dilation and constriction

Between somatic and molecular death (there is a period called physiological gap)

CONT + HOW TO DIAGNOSE SOMATIC DEATH

In the physiological gap you can transplant organ؟

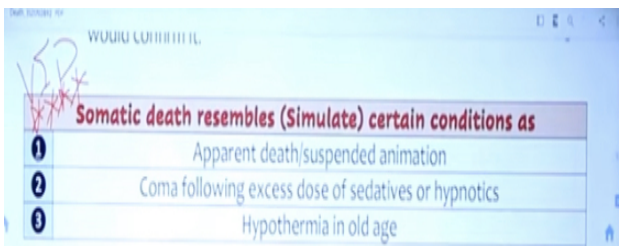
= Diagnosis of somatic death؟

1- cessation of heart beating (by absent of heart sounds for a continuous period 5-10 minutes , and Flat ECG؟

2- cessation of breathing؟

3- CNS (by dilated fixed pupil , ANSENT of papillary and corneal reflex , flat EEG؟

somatic death) حالات تشبه؟



) MOLECULAR DEATH
(CELLULAR DEATH

It’s ultimate death of all cellular elements

Cells will death when the oxygen gets depleted

Happen 2-4 after somatic death

Last tissue that death is muscle tissue which take 3-4 hours

Diagnosis = absence of any response to an electrical , thermal , or chemical stimulus

SIGNS OF DEATH

* Postmortem Cooling = After death's
* Post mortem lividity = Color changes
* Muscle changes - Rigor Mortis

Death Changes (Signs of Death) II

Immediate changes	Early changes	Late changes
❁ Insensibility (cortex death) ❁ Respiratory arrest ❁ Circulatory arrest ❁ Brain/brainstem death	❁ Postmortem cooling ❁ Eye changes ❁ Skin changes ❁ Postmortem lividity ❁ Muscle changes	❁ Putrefaction ❁ Adipocere formation ❁ Mummification ❁ Skeletonisation

BRAIN DEATH

Cortex death vs brain stem death

Cortex is responsible for voluntary and sensibility and brain stem is responsible for respiration , heart sounds

So in cortex death (we will have general muscle flaccdity)

What is vegetative state = persistent severe cortex damage without brain stem involvement

In living cadaver = patient can breath , open eyes but the patient doesn't speak or obey command

Brain stem death involve (coma , apnea and loss of brain stem reflex like papillary ..reflexes , corneal reflex etc

EARLY CHANGES -2

Mentioned before in the table briefly

-Skin changes involves A

1- skin become pale why ? = due to stoppage of circulation

2- skin loss of elasticity and the face looks younger why ?= due to loss of creases تجاعيد

3- lips become brownish and dry why ? = due to drying

EARLY CHANGES CONT

:Muscles changes

1- primary flaccdity = loss of Tonicity and become flaccid

Examples of primary flaccdity (jaw drop , pupil dilate , thorax collapse , sphincter relax , limbs are flat

2- contact flattening = areas which remain in contact with the ground become flat and blood from vessels of these areas is passed out , leading to whiting of the area

CONTINUE

Note that = after death you go into primary flaccdity then rigor Mortis then again flaccdity

3- ocular changes (low IOP , eyeball will become sunken) , corneal opacity , dilated pupil , Tache noir de la sclerotique (black eye)

Tache noir de la sclerotique
(French for Black spot of the -

POSTMORTEM CHANGES

1- cooling (algormortis)

2- livor mortis (hypostasis)

3- rigor mortis

4- puterefacation تعفن

DEATH QUESTION

You have to define (cause , mechanism = mode , manner

Cause involve = PE , thrombous , bleeding

, Mechanism = syncope in CVS , Asphyxia in RS , Coma in CNS

Manner = accidental , sussidcal, homosicdla

Example

Alcholic patient , autopsy clear except edema

Cause of death = brain edema

Mode/mechanism = coma

Manner = natural