

TRAUMATIC BRAIN HAEMORRHAGE

Medical Update

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Types :

1. Extradural

2. Subdural : Acute
Chronic

3. Subarachnoid

4. Intracerebral

EXTRADURAL HAEMORRHAGE

(1 -3 % OF ALL HEAD INJURIES)

It is a collection of blood between the skull and the dura.

The dura is stripped off the bone.

Etiology :Trauma

Site: Most often temporal area as middle meningeal artery grooves inner aspect of temporal bone.

Presentation:

No LOC

No LOC & Subsequent LOC

LOC with recovery

LOC followed by lucid interval &
subsequent LOC

Unconsciousness from time of impact

Symptoms & Signs :

Headache - 50%

Weakness or paralysis of opposite side – 60-70%

Sensory change

Acute rise in ICP – irregular respiration,
bradycardia

Dilated pupil – 50-80%

Diagnosis :

History

Urgent CT Scan Brain

Treatment :

Surgery – Rapid action

ACUTE SUBDURAL HAEMORRHAGE (MOSTLY MALE MID 30'S)

Etiology :

R.T.A

Industrial Accidents

Falls

Pattern of injury :

Brain contusion as brain is propelled over rough surfaces, floor of anterior cranial fossa, sharp edge of sphenoid wing, burst temporal lobe, active bleeding from brain surface , mostly contrecoup injury.

Clinical features :

1. Severity of impact
2. Rapidity of growth of subdural

Unconscious throughout

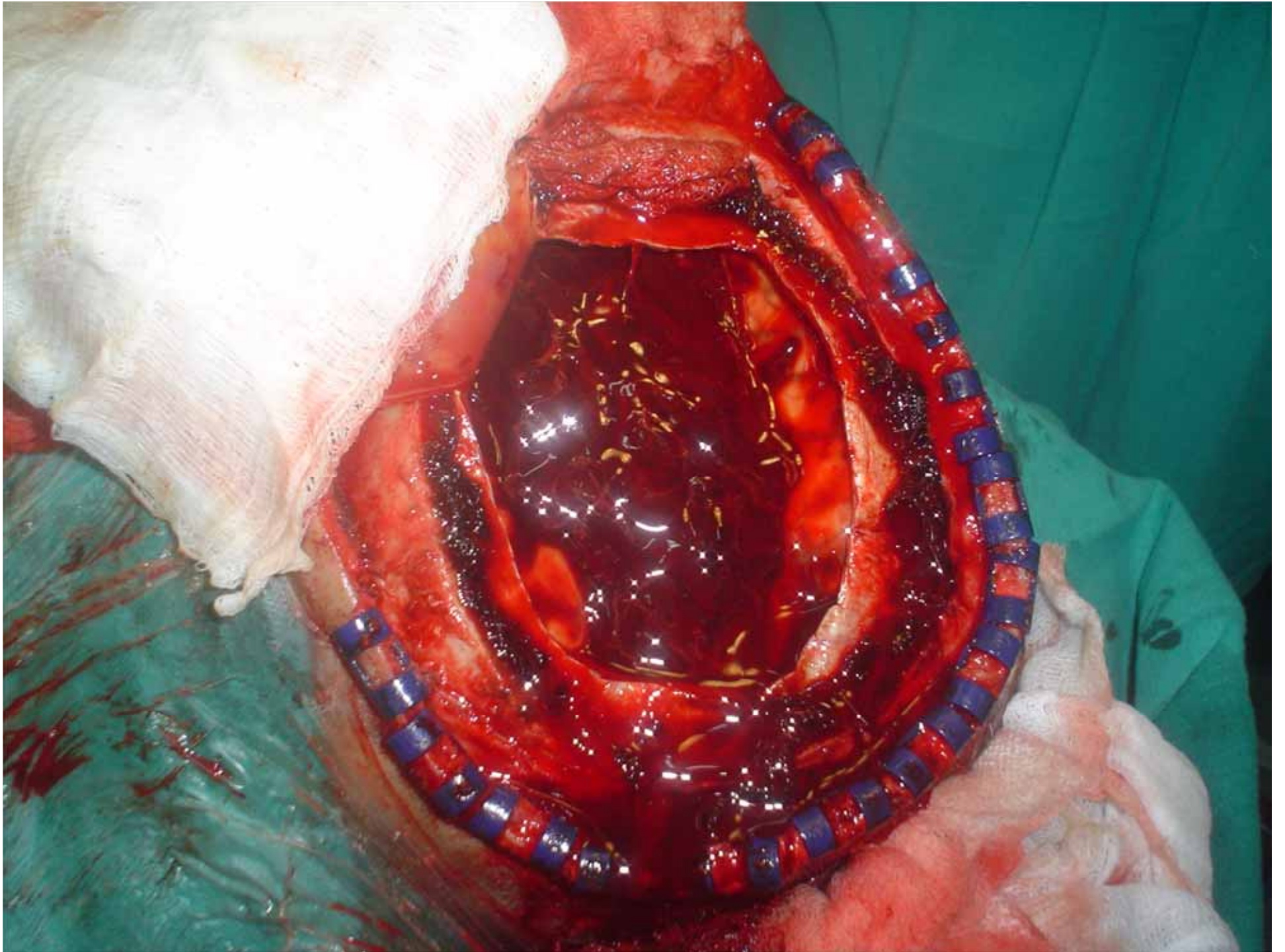
Unconscious to lucid with rapid deterioration

Treatment :

1. Evacuation of acute subdural haemorrhage
2. Control of haemorrhage
3. Evacuation of contused brain

Outcome :

Mortality of 50%



CHRONIC SUBDURAL HAEMORRHAGE

Bleeding – Venous

May reach considerable size.

Cerebellar atrophy and elongation of bridging veins.

Tear of bridging veins and accumulation of haematoma.

Enlargement of haematoma.

Maybe bilateral

Clinical presentation :

Personality change

Paralysis or Paresis

Pressure symptoms

Treatment :

Surgery – Burr hole under local anaesthesia.

Craniotomy

SUBARACHNOID HAEMORRHAGE

Traumatic subarachnoid haemorrhage usually diffused and thin

Bleeding arises from superficial cortical vessels

Clinical features:

Headache

Irritability

Neck stiffness

Fever

Positive Kernig sign

Treatment:

No specific treatment

Spinal drainage

Shunt procedure if hydrocephalus develops

INTRACEREBRAL HAEMORRHAGE

(MOSTLY IN FRONTAL OR TEMPORAL REGION)

Etiology :

Deep contusion of brain and tear of blood vessels caused by rotational acceleration

Maybe single or multiple

Subcortical or deep

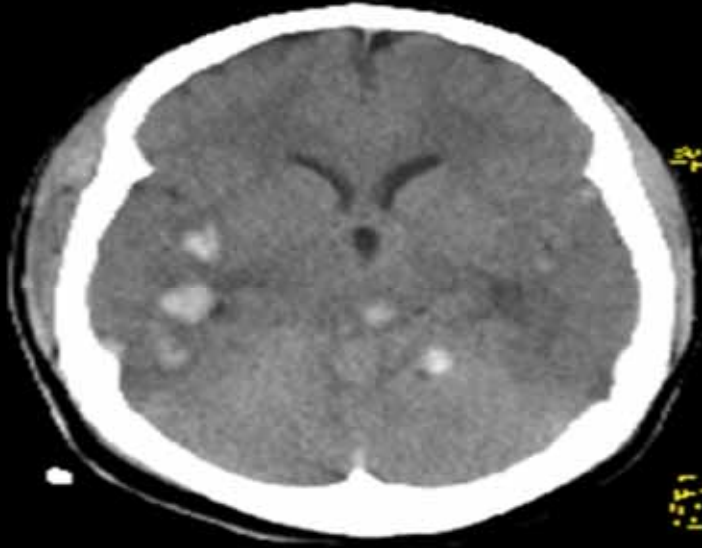
Clinical features:

Depending on the location of the haematoma.

Short LOC followed by lucid interval and later irritability, agitation, unconsciousness and fits

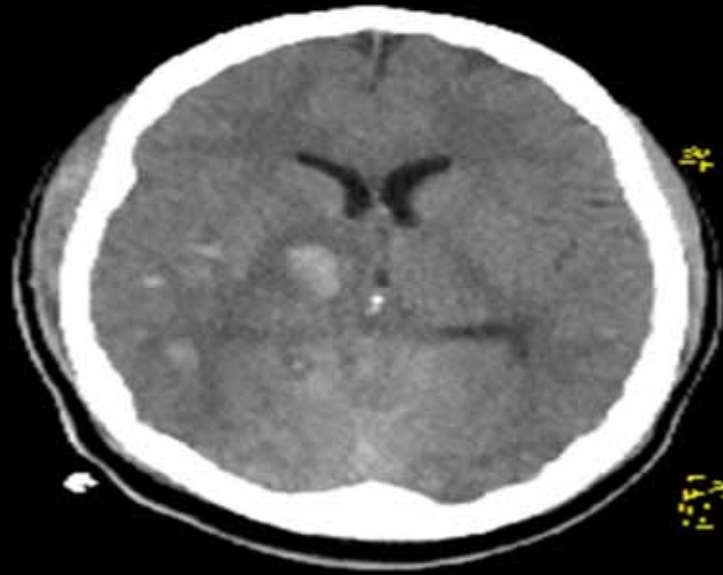
Treatment :

Surgery – Evacuation if haematoma is large and subcortical



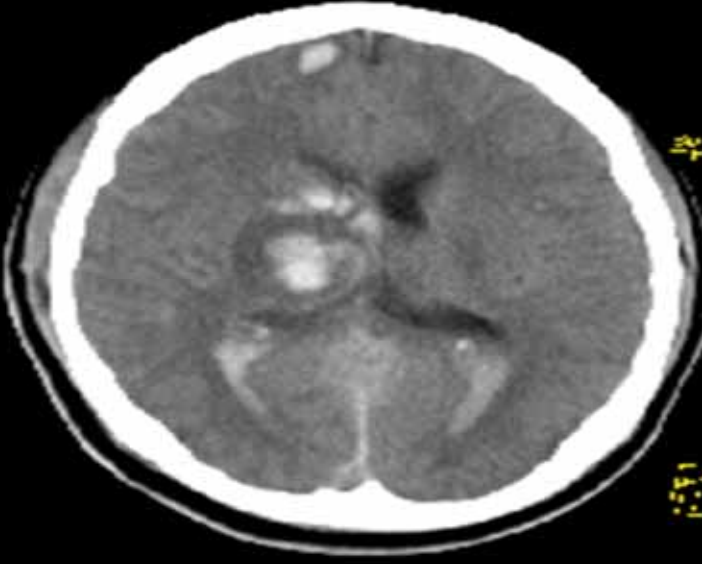
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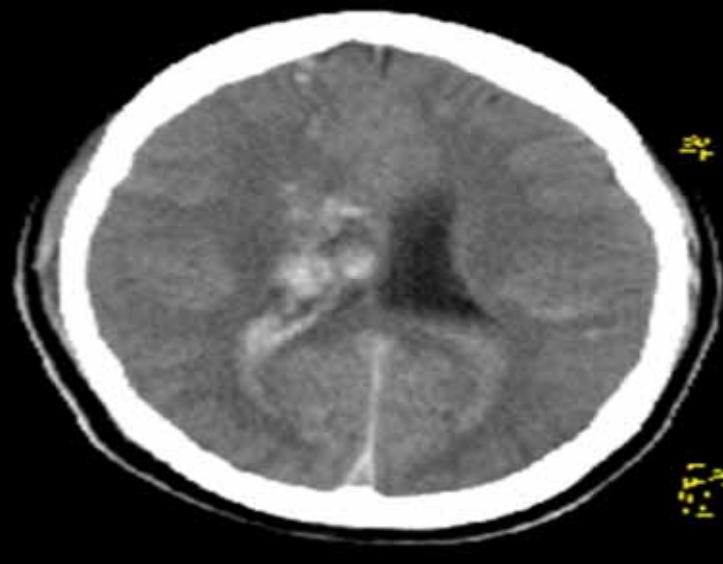
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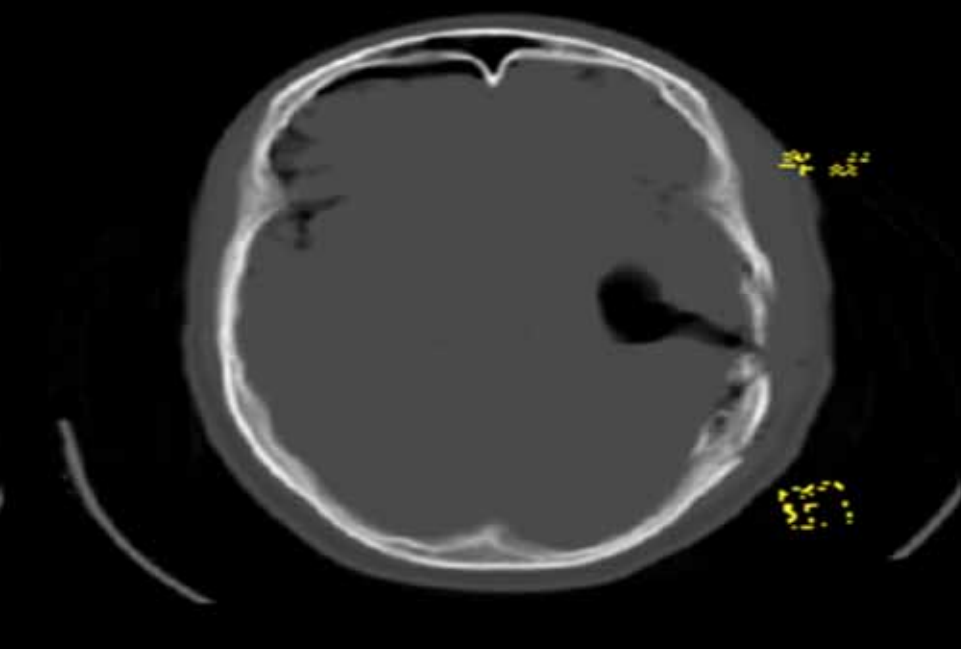
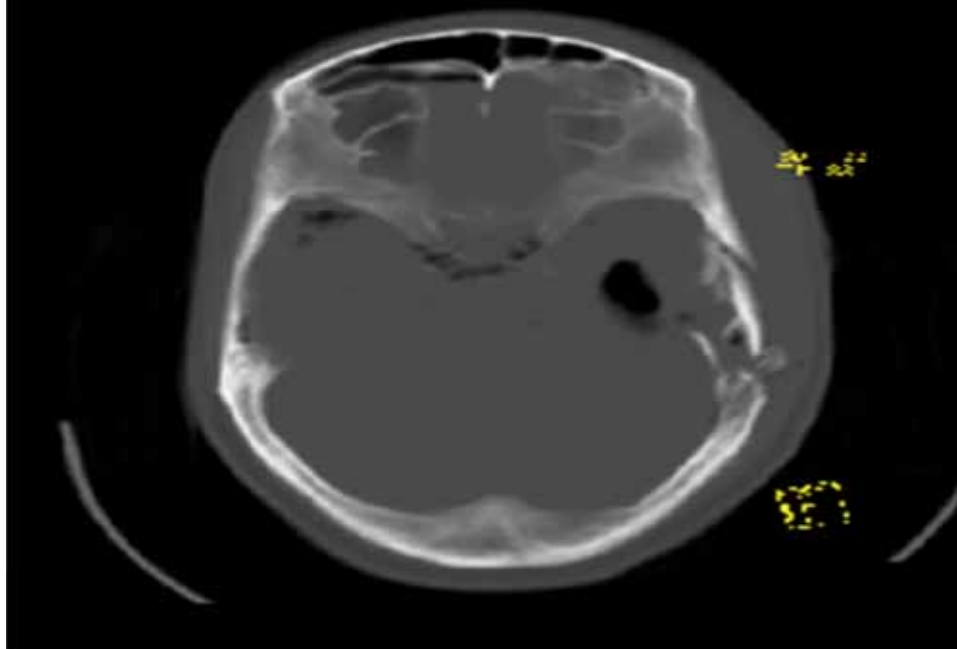
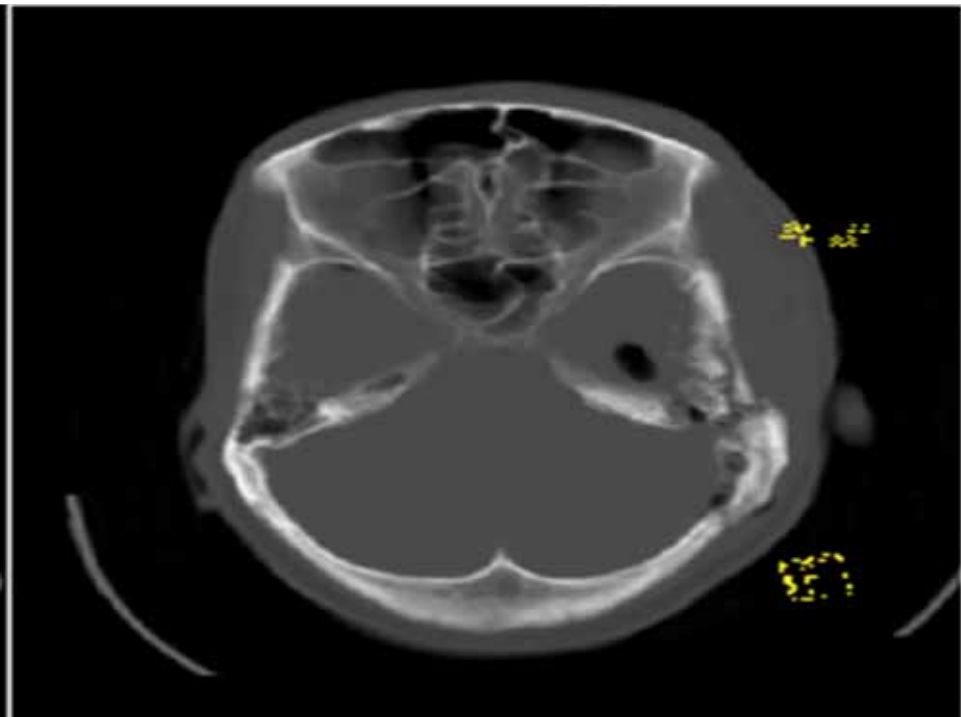
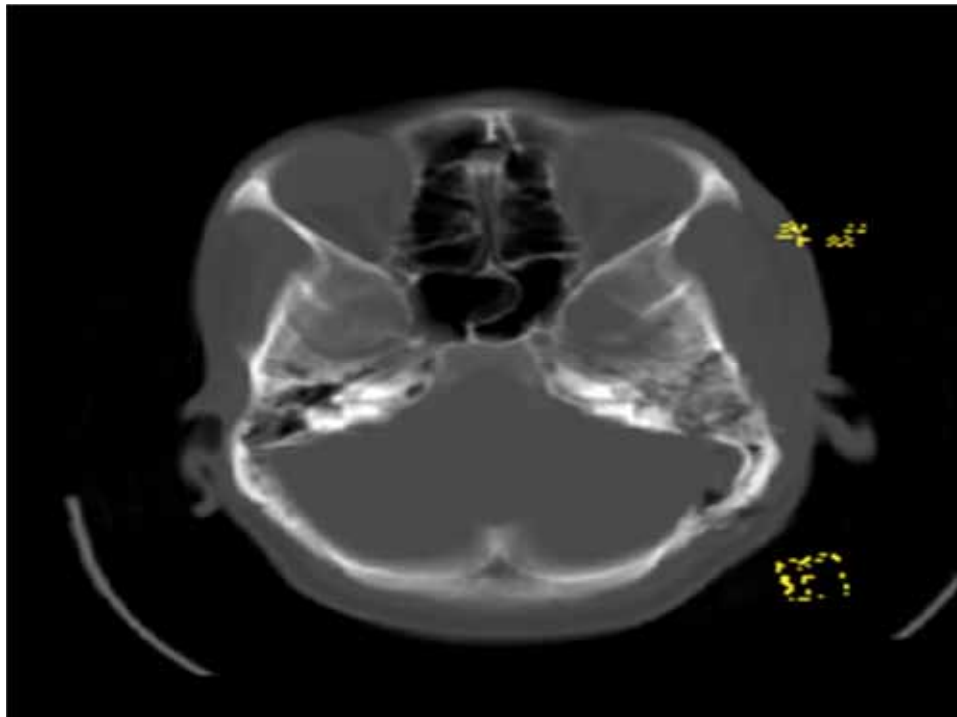
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Thank You