

NAME# AANT FULLAH

Program # Bos Radiology

ID # 14095

Semester # 6th

Subject MRI

Assignment vovi MRT

Teacher Name # Mam A Toofa

Date # ~~12/07~~ 12/07/2020

Ans (1) → image - Brain MRI

→ Abnormal

→ Region:- Brain ~~MRI~~

→ image Type:-  $T_2$  weighted image

→ plane:- Axial

→ DWI:-

→ They appear as bright areas (i.e.) hyperintensities) on DWI.

Infarcted area remain unenhanced in post gadolinium  $T_1$  weighted scan.

\* Typical appearances of affected area in the event of early stroke

→  $T_2$  and Flair images will be normal.

→  $T_1$  images will be normal.

→ DWI  $b_0$  value 0 will be normal.

→ DWI  $b$  values 1000 will be hyperintense.

→ ADC map will be hypointense.

(2)

.k. Typical appearance of affected area 24 hours post stroke.

→ T<sub>2</sub> and Flair images will be hyperintense.

→ T<sub>1</sub> images will be hypointense.

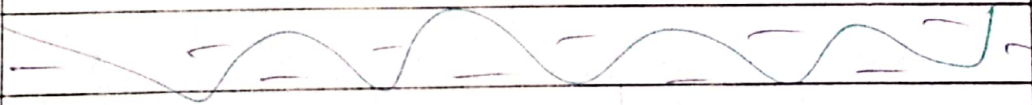
→ DWI b values 0 will be hyperintense.

→ DWI b values 1000 will be hyperintense.

→ ADC map will be hypointense.

Pathology:-

→ Acute MCA infarction.



Ans(2):-

→ Abnormal

→ Region:- Brain MRI

→ image type:- Axial DWI B0

→ Plane:- Coronal Plane

→ Etiology:- Trauma, idiopathic.

→ ~~the~~ clinical presentation:-

Headache, change in mental state,

BEST QUALITY

CP. F. 0)

(3)

M  T  W  T  F  S

Date:...../...../20.....

Neurological deficits.

MRI Appearances

→ crescent shaped MRI is most sensitive to the subacute and chronic cases with Flair being the most sensitive sequences.

T<sub>1</sub>:-

acute:- Hypointense to isointense

subacute:- Hyperintense.

chronic:- Hyperintense

T<sub>2</sub>:-

Acute:- Hypointense

sub acute:- Hypointense to hyperintense

chronic:- Hyperintense

Flair:- Hyperintense at all stage.

CP (f.o)

BEST QUALITY

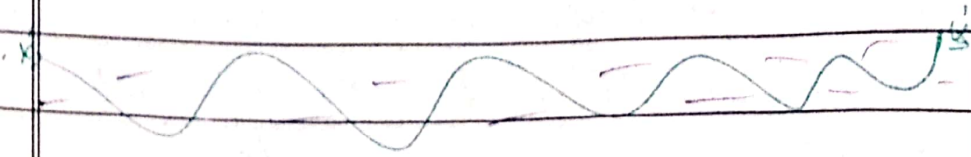
(4)

MONDAY TO FRIDAY

Date:...../...../20.....

Pathology:-

→ Subdural Haemorrhage.



Ans (3)

→ Abnormal

→ Region:- Brain (Pituitary fossa)

→ image:- Brain MRI

→ image type:- T<sub>1</sub> weighted images.

→ planes:- Sagittal plane

→ contrast:- post contrast studies.

→ etiology:- unknown

→ Clinical presentation:- hormonal imbalances, visual disturbances.

→ Microadenomas - less than 10mm

→ Macroadenomas - greater than 10mm.

MRI appearance

T<sub>1</sub>:- Hypointense

T<sub>2</sub>:- unpredictable variable signal.

BEST QUALITY

(P.T.O)

5

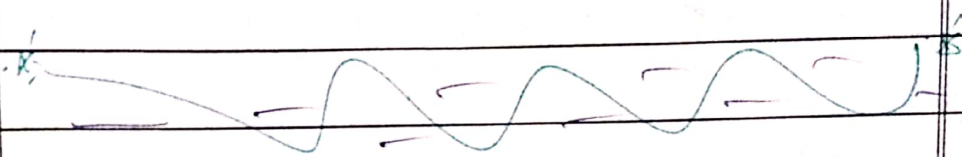
M □ T □ W □ T □ F □ S □

Date:...../...../20.....

→ T<sub>1</sub> contrast enhanced :-  
Hyperintense.

Pathiology :-

→ Pituitary Adenoma



Ans (4)

→ Abnormal

→ Region :- Abdomen

→ images :- MRI Liver

→ images type :- T<sub>2</sub> TSE FATSAT  
Axial / T<sub>2</sub> weighted images.

→ DWI :- hyperintense with low  
b values (T<sub>2</sub> shine through), iso-  
intense with high b values and  
on ADC map.

→ contrast :- post contrast  
studies.

∴ enhancement features depend  
on the size of the lesion,

homogenous arterial phase

enhancement (< 1.5 cm).

6

M T W T F S

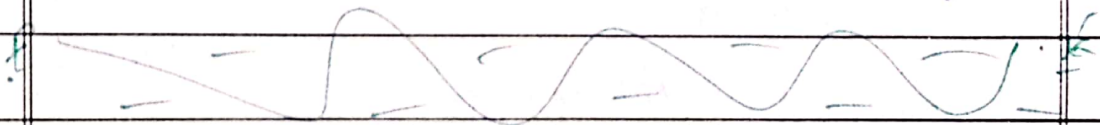
Date:...../...../20.....

## MRI Appearance

- T<sub>1</sub> - homogenous hypointense.
- T<sub>2</sub> - homogenous markedly hyper-intense.
- Hepatobiliary phase - hypointense.

## Pathology -

→ Liver Haemangioma



The End