

Central Nervous System

SHEET# 1 - SMALL GROUP DISCUSSION (SGD)

**LEC. TITLE : CEREBROVASCULAR ACCIDENT
(STROKE)**

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If you come by any mistake , please
kindly report it to
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Case for small group discussion: Cerebrovascular accident (Stroke):

A 65 years old male with history of chronic arterial systolic hypertension, non-insulin dependent diabetes, and heavy smoking for the last 40 years, presented with acute onset right-sided weakness. He went to bed at 11 pm and woke up in the morning at 7 am with weakness involving the right side of the face, arm, and to a lesser degree the leg. His family also noted his speech was slurred and he had difficulty producing words. He did not have any change in the level of consciousness and no visual problems. He was taken to the emergency room and reached there at 8 am.

Past medical history is significant for one attack of transient painless loss of vision in the right eye 6 months ago, and an attack of right-sided weakness, which gradually improved one year ago.

Physical exam revealed normal pulses, normal heart sounds, and a carotid bruit on the right. Neurologically, he had dysarthria and dysphasia (aphasia). There was right lower facial weakness, weakness in the right arm and leg, and right homonymous hemianopia. Tone was increased on the right. Reflexes were brisk on the right with positive Babinski sign.

Questions:

- 1- Localize where would the lesion most likely be and why?
- 2- What is the most likely pathology of the lesion?
- 3- Identify the most likely etiology for that pathology.
- 4- Identify the risk factors this patient has.
- 5- How would you expect the physical findings to be had this patient had a lower motor neuron disease instead?
- 6- Discuss the available treatment options for this patient, medical and surgical if relevant.

رأى الطبيب الراقية

history / التاريخ / فحص سريري

live kidney test
وهي شائعة

في نخاع العظام

تقيم الكلية
بمعاييرها

1) history هو هينا في العمر للمريض / السن

- مثلا سألته كيف يكون مشغول بها
- مثلا سألته من صام كل يومين
- مثلا سألته اكلت مية فيها سكر
- تاريخ العائلة -- هل في بيته --

مثلا اريد -- هل في بيتك مثلا
مثلا سألته ذلك شوي

case 1)

(65 year male)

(no child)

- عاشق بالاحتمال انطلع على العمر و gender اجبت
- اقرانها وركزت على المناسبات
- سكن في hint بكلمة
- واطلع برودة دايت كيني تقرا السؤال
- عنه مثلا السؤال

التاريخ المرضي عندك انما هو

في هذا الكلام

hypertension non indian dependent

انما هو انما هو انما هو انما هو

heavy smoker

- تم سألته وكم يمشي يمشي
- كم يمشي يمشي انما هو
- صوت 25 يمشي وطان

Ashe

في هذا الكلام

cus - proi carotide = abnormal sound of vessels -

abnormal flow - turbulance

-- stenosis

Q no 21

significant ...

proi / stenosis

①

neurological examination

abnormal speech

R - lower facial weakness

R hemiparesis hemianopia

L visual field defect

الضعف البصري

-- Right side area of R eye affected

In same half of visual field eye

-- دسرس - قائلو اللسان
Corticospinal tract

Stimulus ... tone increase

تزيد قوة التشنج ← tone increase

reflexes -

Brink sign

abnormal = غير الطبيعي موقوفاً بوقتها

soul of Food

stimulus -
gait down

big toe - (ترفع القدم)
extension

- major abnormal signs

دوسرس

face arm leg / speech -

Thrombosis or embolism.

1 Middle cerebral artery

contralateral side

affect by

distribution

سكتة دماغية
سكتة شريانية
سكتة شريانية
سكتة شريانية
ضعف في
الوجه
أو
اليد
أو
الرجل

↓
ischemia

↓
cerebral

hemorrhage

liquefactive necrosis

ischemia of one part of brain

usually fatal

emboli
carotid brd

↓
one side
outside
- from heart

thrombosis
↳ Atherosclerosis inside brain.

Atherosclerosis → detach
pieces cerebral
artery

carotid prot

left side

left middle artery
N cerebral embolism

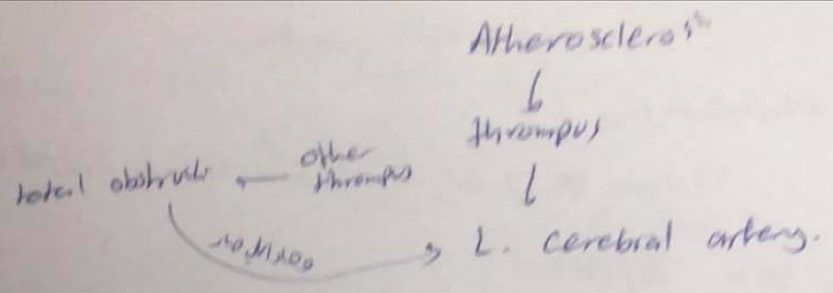
Blood clot

left N - stroke

caused

(infarction)

patho

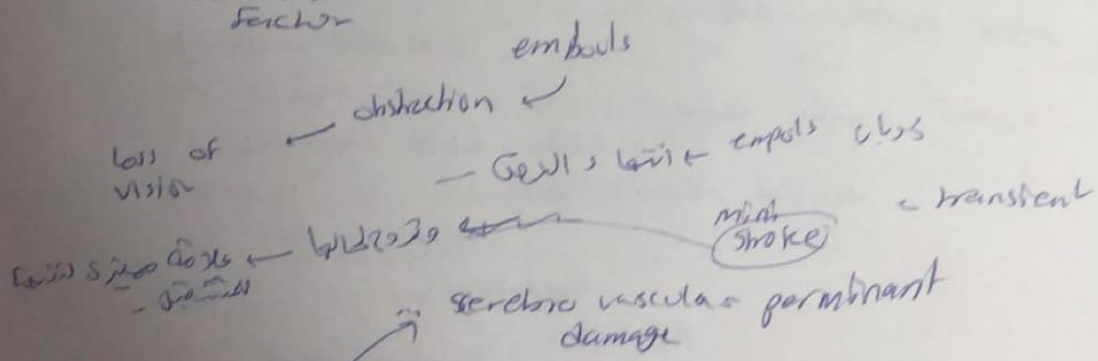


Risk factor

- * diabetes
- * Age
- * hypertension

Past Medical history
transient ischemic attack

- Small impulse via VSA via heart
- atrial fibrillation
- embolus
- other risk factor



stroke
upper motor
lower motor

* * manifestation - upper motor → hyper / low reflexes -

lower motor neuron → control → signal → loss of reflexes -
flacid paralysis

spastic signs

distribution

clinical signs

5- How you expect

upper limb Babinski's sign hyper reflexia tone increase

lower limb hypotonia Flacid

distribution

upper hyperreflexia Babinski sign

lower + upper motor neuron

stroke IV - cerebral vasculitis, cerebral thrombosis, long term thrombolysis

IV streptokinase, Alteplase

within the first 4 hours of attack

ischemic or hemorrhagic CT scan, cerebral

Ischemic stroke

IV plasminogen activator thrombus obstruction

thrombolysis

جراحة

الاجراء الجراحية

IV - tissue plasminogen activator

∴ stroke obs

athero sc
thrombus
embolus

Right left side cerebral a.

lateral Medial left cerebral a.

ischemic
infarction
distribution of

contralateral hemiplegia

disphasia -

- cortical to subcortical
upper motor neuron
of spinal cord.

weakness → hyperreflexia

HT → thrombolysis

جراحة → thrombolysis

∴ tissue plasminogen activator

IV tissue plasminogen activator

- tissue plasminogen activator *
- ischemic stroke

- 3-4 h - 24 h - 3-4 h - 24 h

- 3-4 h - 24 h - 3-4 h - 24 h

