

# A CASE OF STROKE IN YOUNG

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#### INTRODUCTION

- Stroke in young has been interesting topic since ages as the cause of young stroke is different from adults . Persons < 40 years of age are considered young. The most common cause of stroke in young being cardiogenic cerebral embolus. (1)
- Causes- migraine, vasculitis cardioembolism, thrombophilias, pregnancy, OC pills, venous, radiotherapy, hypertension associated vasculopathies, genetic.(2)
- Oral contraceptive pills are cause of stroke in young women in long term use .

#### **CASE HISTORY**

A 29 year old female was brought to emergency department with chief complaint of loss of consciousness since 1 hour.

INFORMANT- MOTHER

- Patient was apparently normal till morning 5 A.M. when she developed severe headache with multiple episodes of vomiting after which the patient has unsteadiness in walking. H/o of one episode seizures after which the patient was drowsy and became unconscious.
- Patient was married recently and she was using oral contraceptive pills since 3 weeks.

### **MENSTURAL HISTORY**

Regular cycles with normal menstural flow LMP:-04 /05/2017

No previous history of use of contraceptive pills No previous history of menstural irregularities

### GENERAL EXAMINATION

- Patient is unconscious
- Moderately built, Moderately nourished
- No Pallor/ icterus/ cyanosis/ clubbing /lymphadenopathy/ pedal edema
- All vitals were stable.

## **SYSTEMIC EXAMINATION**

### CENTRAL NERVOUS SYSTEM:-

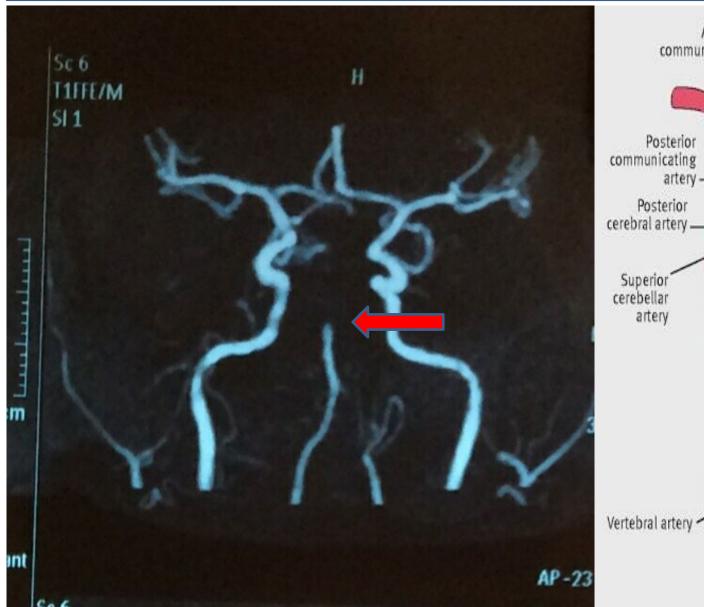
- Unconscious
- On ventilator
- B/L Pupils sluggish reaction to light, anisocoria +
- Spinomotor System Examination

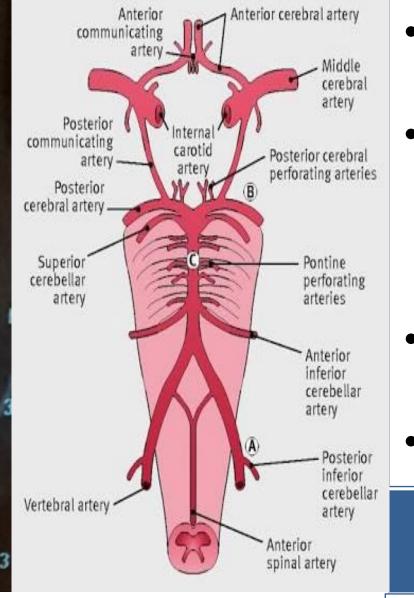
Tone –bilateral upper and lower limb hypertonia DTR- Brisk in bilateral upper and lower limb Bilateral plantar mute

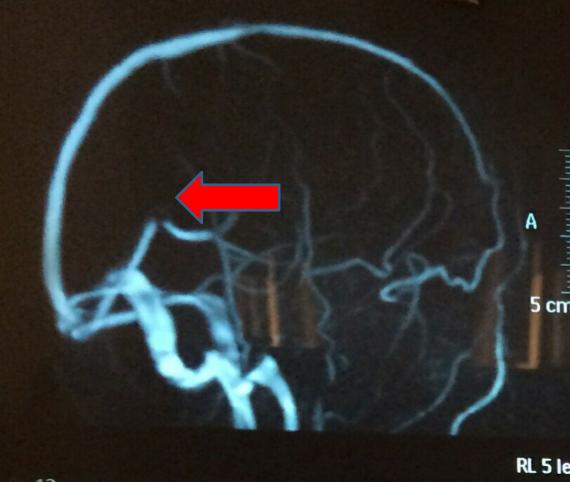
No neck stiffness or signs of meningeal irritation.

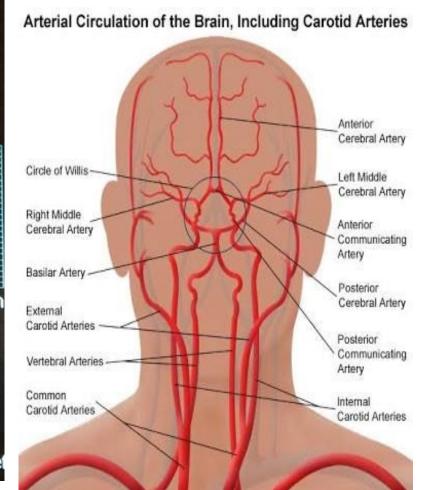
Other system examination was normal.

#### RADIOLOGICAL IMAGES









#### **INVESTIGATIONS**

- All routine investigations & FLP normal.
- Hb -9.2, Serum ferritin- 8 ng/ml(10-120ng/dl
- PT-16 SEC, INR-1.34 ,aPTT-27SEC
- Serum APLA IgG-0.4 GPL U/ml, (<10)</li>
- Serum APLA IgM- 0.7 MPL U/ml (<10)</li>
- Plasma homocysteine- 4.27 micro mmol/L( <12)</li>
- ANCA IgG by ELISA-2.06
- ANTI MPO IgG-2.06(<20)</li>
- ANTI PR3 IgG- 2.81(<20)</li>
- Anti ds DNA- Negative,
- Lupus anti coagulant Absent
- DRVV screen and Ratio- Normal
- Factor II & Factor V negative for mutation
- Beta -2- Glycoprotein IgG & IgM- negative
- Protein C -123.47 & Protein S-114.45
- VDRL- Negative
- BT & CT- normal
- CSF analysis- Normal
- Serology(HIV, HBsAg, Anti HCV)- negative
- Chest X- Ray Normal, ECG- normal
- CT Brain-"Hypodensities in the brainstem".
- MRI with MR angio and MR venogram :-
- Total occlusion of mid and distal basilar artery with perforator artery occlusion and bilateral fetal PCA.
- 2 D ECHO- Normal
- EEG- Features suggestive of diffuse cerebral dysfunction.

#### DIAGNOSIS AND MANAGEMENT

- DIAGNOSIS- Top of basilar artery syndrome probable etiology being oral contraceptive pills.
- Patient was put on antiplatelet drugs, anti oedema measures and other supportive measures were given.
- CURRENTLY the patient is out of ventilatory support, decerebrate posturing to pain stimulus
- Patient is in persistent vegetative state.

## **DISCUSSION**

- Stroke is the 2<sup>nd</sup> leading cause of death worldwide according to 2011 statistics. It is defined as abrupt onset of a neurological deficit that is attributable to a focal vascular cause. (3)
- OCP's usage enhances platelet aggregation, enhances antithrombin-III activity, decrease serum antithrombin levels and increase coagulation factor VII .(1).Hence it is a risk factor for thrombus formation.
- Epidemiological studies showed an increased risk of stroke in women who used oral contraceptive pills with ethinyl estradiol >50mcg.The antiestrogenic effect of of levonorgestal in low dose OCP's might increase the chances of aneurysm and bleed or both.(4)
- The attributable risk of stroke in young women using OCP's is about 1 per 200000 woman years.(5).
- Incidence rates of stroke under age of 45 years was 7-15/100000 people/year.(6)
- Development of headache after intiation of OCP's usage is one of contraindication for OCP's as mentioned by WHO .(7)
- A stroke can be attributed to Ocp's if the woman was using them at the time of cerebral infarct in the absence of other identifiable causes.(1)

### **CONCLUSION**

- Hereby after doing complete work up for young stroke where all investigations for all known causes stroke were normal. We therefore conclude that OCPs usage was the cause only identified.
- Earlier OCPs with higher oestrogen were proved to cause stroke. So now-a-days the low dose oestrogen pills are being used.
- So here we report a rare case of young stroke caused due to OCPs usage for short duration of 5 days.

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