Middle Cerebral Artery Territory Infarction Following Elective Abortion – Case Report

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The risk of thromboembolism increases three to four times in oral contraceptive users and sixfold in normal pregnancy due to hypercoagulability. Consequently, complications like deep vein thrombosis, pulmonary emboli and cerebrovascular accidents occur frequently, most being encountered during the last trimester of the pregnancy or in the puerperium.

Incidence of stroke in the first trimester of the pregnancy has been extremely rare. Since this period coincides with the time of voluntary abortion, we describe here a case of major stroke following attempted abortion. To the best of our knowledge, such an incident has not been reported previously.

A 28-year-old previously healthy woman, fourth-gravida, underwent voluntary termination of 8-week pregnancy. She did not recover from the anaesthesia and in an unconscious state was brought to our hospital after 72 hours. Her previous deliveries were uneventful. She was using oral contraceptives after her third delivery which were stopped two months before the conception. On physical examination she was deeply comatosed with Chyne-stokes breathing. The temperature was high-grade, the pulse was 100/minute, regular and the blood pressure was 150/90mmHg. Decerebrate spasm in all four limbs was present with planters extensor bilaterally. Left pupil was dilated and fixed. The neck was supple. Other systems were normal.

On laboratory tests all her routine investigations were normal except mild anaemia, a polymorphonuclear leukocytosis and slightly raised globulins. Tests for malarial parasite, VDRL and HIV 1+2 were negative. The ultrasonography of the abdomen revealed bulky uterus with debris of conception. The 2D-Echocardiography of

heart including carotid Doppler studies were normal. Computed Tomography of the cranium showed infarction in territory of the middle cerebral artery in dominant hemisphere (Figure 1).



Fig. 1: Noncontrast CT-Scan cranium showing complete left cerebral hemisphere infarct in territory of the middle cerebral artery.

We would like to annotate that the incidence of stroke during pregnancy depends upon the population studied and prevalent socioeconomic conditions. In this case apart from existing predisposing factors like use of oral contraceptives and pregnancy, other factors which might have contributed for the stroke after the anaesthesia would be – overnight fasting producing a state of dehydration, an improper airway management during general anaesthesia and/or a precipitous fall of blood pressure during the procedure, amniotic-fluid embolism and vasospasm of the middle cerebral artery itself. Routine performance of tests for protein C, protein S, antithrombin III, Factor V Leiden, lupus anticoagulent-anticardiolipin antibodies, etc. should also widen insight in such a complication.