Bell's palsy complicating pregnancy

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Pregnancy may well be a risk factor for Bell's palsy and may account for a more severe disease. The etiology of Bell's palsy in pregnancy remains unclear. Knowledge of the nature and course of Bell's palsy during pregnancy will assist the physician to help patients without administering unnecessary treatment.

A gravida 4 para 0+3 was booked in the antenatal clinic at 15 weeks of gestation for antenatal care and delivery. Her pregnancy was normal except for history of excess vomiting at 9-12 weeks of gestation. She gave a history of 3 recurrent first trimester miscarriages and was investigated for the same. All investigations including karyotyping of both partners, anticardiolipin antibodies and lupus anticoagulant were normal. The thyroid function tests revealed mild sub clinical hyperthyroidism (thyroid stimulating hormone 0.19 iu, free thyroxine 8.0pmol/L, free triiodothyronine normal) but no treatment was initiated. There was no history of diabetes or hypertension in the family or herself. She was on aspirin (from the referring clinician) from the beginning of her pregnancy in view of the history. Her pregnancy progressed well when at 33 weeks of pregnancy she presented to the clinic with bulging right eye and deviation of the left angle of the mouth. This was preceded by vertigo, headache and pain in the right eye for 3 days. There was no history of fever, vomiting or convulsions. On examination, blood pressure was 110/56 mm Hg. There was bulging of the right eye with deviation of the angle of the mouth to left side. There was difficulty in closing the right eye. Ocular movements were normal in both eyes. There was no sensory loss. Light reflex was slow on the right and normal on the left. Right peripheral facial palsy was diagnosed on clinical grounds and prednisolone was prescribed 50mgm/day to be tapered after one week. Physiotherapy and antibiotic ointment for the eye was also prescribed. She was followed up in the clinic regularly and the facial palsy subsided completely in 8 weeks time. At 39 weeks, she was in spontaneous labor but needed cesarean delivery for failure to progress. She had a baby girl weighing 3540 gms and remained well at postnatal visit.

Bell's palsy is the most common cause of unilateral facial weakness. It affects women of reproductive age 2-4 times more often than men of the same age.[1] The calculated incidence of Bell palsy in pregnancy and puerperium ranges from 38-45.1 per 100,000 births.[1] Usually, there is only one acute episode of Bell's palsy during a pregnancy; although recurrent Bell's palsy in 2 successive pregnancies has been reported.[2] Bilateral disease is reported in 3% of cases.[3] Recurrence in subsequent pregnancy and bilateral disease are prognostic factors for unfavorable recovery. Fluid retention and slowing of peripheral venous flow may cause venous congestion within the fallopian canal, leading to mechanical compressive neuropathy. Such edema around the patulous and narrow course of the seventh nerve along the temporal bone may explain the occurrence of Bell's palsy in pregnancy.[4] The history of headache, vertigo and pain may be explained on the basis of fluid retention and mechanical compression. Some authors have suggested that ovarian hormones may be responsible for the higher incidence of Bell's palsy during pregnancy.[5] The etiology of facial nerve paralysis in pregnant women remains unclear. The clinical course of the disease is as in non-pregnant women. Supportive therapy and corticosteroids are the mainstay of management in pregnancy.[6] Corticosteroids may relieve the periauricular pain but may not have effect on hastening recovery. No neonatal side effects have been reported.

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