CASE REPORT

A Rare Case of Chorea Gravidarum

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Abstract

Chorea Gravidarum is the term given to chorea occurring during pregnancy. It is not an etiologically or pathologically distinct morbid entity but generic term for chorea of any etiology. We report a case of Chorea Gravidarum, who had past history of Rheumatic fever and Sydenham's Chorea in childhood. Factors associated with recurrence of chorea; those aggravating chorea during pregnancy and its management have been discussed.

Keywords: Chorea gravidarum (CG), Rheumatic disease.

INTRODUCTION

Chorea gravidarum is the generic term used for chorea of any etiology occurring during pregnancy. The incidence is markedly decreased due to a decline in incidence of rheumatic fever. We report a rare case of chorea gravidarum. In spite of physical and psychological affection in mother, there are no ill effects on the fetus.

CASE REPORT

A 22 years old woman reported on 14th August 2007 for routine antenatal check-up with history of amenorrhea for 8½ months. She was second gravida with full-term normal hospital delivery 2½ years back. The antenatal, intranatal and postnatal periods were uneventful. In the present pregnancy, she was irregularly attending the antenatal OPD at the Primary Health Center. Her past menstrual cycles were regular and her due date was 22nd Aug 2007. She had past history of Sydenham's chorea for which she had received treatment. Her family history was unremarkable. In the antenatal OPD, it was noticed that she had abnormal facial movements with frequent protrusion of tongue, side to side rolling of eyeballs and she was repeatedly yawning. Abnormal movements of hands were also noticed.

Detailed history from her brother revealed that since three months, she was under stress and was mentally disturbed due to repeated quarrels with her husband who was alcoholic and used to beat her. The reason for quarrel apart from alcoholism was that she was unable to do her routine household work normally. Since 2 months there was history of falling of things from her hands. She was emotionally labile and had frequent crying spells. She was hospitalized in obstetric ward with a provisional diagnosis of Sydenham's chorea and psychiatrist's and physician's opinion were sought. Her past records were reviewed. During childhood, at about 12 years of age, there was history of clumsiness, difficulty in walking and dropping of things from hands. For this, a neurologist was consulted and she was diagnosed to have chorea. She was receiving injection Penidura, every 6 weeks, till 18 years of age. She had no history of joint pain, swelling, fever, repeated pharyngitis, palpitations or breathlessness.

On general examination, she was average built and of normal intellect. She was repeatedly yawning with abnormal facial movements and abnormal movements of hands. There was repeated protrusion of tongue and side to side rolling of eyeballs. Cardiovascular system examination was within normal limits. Other systemic examination was within normal limits. Clinically, uterus was term, with vertex presentation and regular fetal heart rate. Her cervix was favorable. She was investigated. Her routine laboratory tests were normal. Blood group was A Rh positive, ESR was 26 mm at end of first hour. Serum TSH was normal. Serum calcium was normal. Her CRP, ANA and APL antibodies were negative; throat swab for culture showed no growth. USG corresponds to 39 weeks with no obvious congenital anomalies.

She went into labor spontaneously and delivered a full term normal female baby weighing 2.6 kg. She was discharged on request on fifth postnatal day.

On follow-up after 1 month, her symptoms had subsided.

DISCUSSION

Chorea is a greek word for dance. Chorea gravidarum is the term given to chorea occurring during pregnancy. It is not an etiologically or pathologically distinct morbid entity but a generic term for chorea of any etiology. Chorea is an involuntary, abnormal movement, characterized by brief, nonrhythmic, nonrepetitive movement of any limb, often associated with nonpatterned facial grimaces. The first description of chorea Gravidarum was made by Horstius in 1961. Most cases are a resurgence of Sydenham's chorea in the hormonal milieu of pregnancy. 80% of CG cases are seen in first pregnancy,[1] but may affect second, third or subsequent pregnancy. In 50%, symptoms start in first trimester.[1] There is 21% chance of recurrence in future pregnancy. A high index of suspicion and vigilance should be maintained while making a diagnosis of CG. Physical examination includes a careful general, systemic and neurological examination. The affected limb is hypotonic, joints are floppy and knee jerks are pendular. Normally, the arms dangle by the sides, but with chorea, due to hypotonia they flail about. At times, continuous involuntary movements are impossible to sustain. Protruded tongue darts in and out uncontrollably. Emotional stress aggravates the movement of CG.[1] The movements disappear during sleep.[1] Chorea may be unilateral hemichorea.[1] The patients may attempt to disguise chorea by incorporating it into mannerisms or gestures.[1] In mild chorea, patients are generally unaware of involuntary movements. Chorea movements are more distressing to observers than to the individuals. Willson and Preece (1932) found that the overall incidence of CG was approximately 1 case per 300 deliveries. This condition is rare now probably as the result of a decline in rheumatic fever. In recent times, most cases of Chorea appearing during pregnancy are caused by SLE, Huntington disease, Antiphospholipid Syndrome, Wilson's disease and Idiopathic. Several pathogenic mechanisms for CG have been offered. Many patients may give history of previous rheumatic fever and chorea. Of patients who present with chorea and no apparent carditis, 20% may develop rheumatic heart disease after 20 years. Many patients with oral contraceptive induced Chorea have a past history of chorea, which in 41% of cases is of rheumatic origin.

The estrogen and progestational hormones may sensitize dopamine receptors presumably at stria nigral level and induce chorea in individuals who are vulnerable to this complication by virtue of pre-existing pathology in basal ganglia. Estrogen can influence neural activity in the hypothalamus and limbic system directly through modulation of neuronal excitability, and they have complex multiphasic effects on nigrostriatal dopamine receptor sensitivity.[6] Even though chorea associated with rheumatic fever, CG may not be associated with preceding streptococcal infection. In our patient, ASO titres within normal limit and throat culture were negative.

Therapy consists of rest and seclusion, careful feeding and emotional support. Drug treatment is indicated for those with severe disabling chorea or when the fetus is in danger due to dehydration, malnutrition or disturbed sleep. Death is rare.[1] Fetus is not affected.[1] In the past, rheumatic disease was generally the etiology, but today, collagen vascular disease should also be considered.[2]

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