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OBSTETRIC CASE REPORT

Detailed description of a pregnancy associated with severe chronic fatigue syndrome

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Case report

A 31-year-old clinical psychologist booked in her first pregnancy at 14 weeks gestation with a diagnosis of chronic fatigue syndrome (CFS) alternatively known as myalgic encephalopathy.

The problem began in January 1995. Whilst on holiday in Egypt she had to be admitted to the local hospital because of a sore throat, feeling generally unwell and 'collapse'. Investigations were all normal apart from a raised white cell count of $14{\cdot}8\times10^9$/l. Further investigations were subsequently undertaken by her general practitioner; thyroid function tests, virology screen, monospot test, immunoglobulins and lymphocyte subsets were all normal.

At booking a 2-year history of relapsing and remitting tiredness was given and she had not worked during this period. She had been bed bound most of the previous year and used a wheelchair to attend the antenatal clinic when she was accompanied by her husband who was extremely supportive.

Antenatal care was undertaken in the combined obstetric/medical clinic. There were no specific factors suggesting myasthenia gravis and her skeletal muscles were not weak nor pathologically wasted. An acetycholine receptor antibody screen, neurological examination and electromyography were all normal.

The patient had collected extensive information on CFS and had kept a personal daily record of her well being score (WBS) and quantity of sleep from 13 weeks before conception and maintained it throughout pregnancy and the puerperium (Figure 1). The well being score was self rated on a scale of 1 to 10 where score 1 was extreme fatigue leading to inability to open eyes and to hold meaningful conversation while continuously lying on a bed, score 2 denoted CFS symptoms and constant fatigue but able to open eyes while lying on a bed, score 3 was again extreme fatigue but no CFS symptoms provided absolutely no activity was performed. Score 4 denoted carrying out small tasks like nail cutting and reading a paragraph before onset of fatigue, score 5 denotes the ability to get out of bed and score 6 was able to undertake a larger task spread over a long period of time, e.g. preparing tea may take most of the day to achieve. Scores of 7, 8 and 9 denote increasing activity levels rising to 10 which was her 'normal' active self. The total duration of sleep was recorded and the WBS was recorded as 2 values representing the highest and lowest energy level each day. Whilst under observation the patient repeatedly expectorated saliva into a cup as the effort to swallow it was considered excessive.

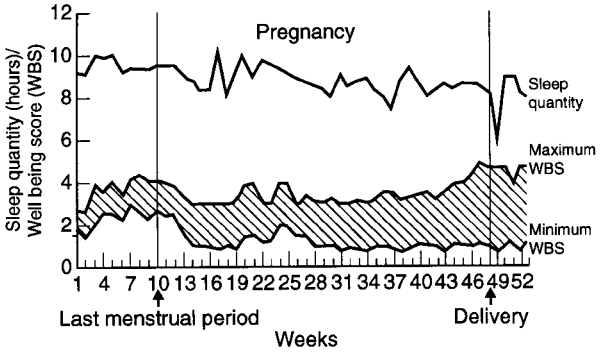

Figure 1. Weekly sleep quantity (hours of sleep), maximum well being score and minimum well being score. (Weekly scores derived from mean daily assessments.)

The patient took 2 weeks to recover from the exhaustion and fatigue caused by the first visit to the hospital, therefore, to avoid a relapse she subsequently stayed overnight in the hospital before routine antenatal check ups. A physiotherapist and community midwife made regular home visit.

In view of her reported severe disability the social worker and an occupational therapist were involved to make arrangements for assistance with child care. The 'interference' was strongly resented and the patient moved to the south of the country for 10 weeks during pregnancy.

Admission to the hospital at 20, 30, 33 and 36 weeks' gestation was necessary for antenatal care and pregnancy progressed satisfactorily, blood pressure, urinalysis and haemoglobin concentration all remained normal. Her husband attended parentcraft classes and she regularly used reflexology and aromatherpy.

Spontaneous labor occurred at 38 weeks' gestation and after an uneventful first stage of labour lasting 9 hours, a low forceps delivery was performed for maternal exhaustion. A live female baby weighing 3260 grams was delivered in good condition and was subsequently breast fed.

Graphical representation of sleep and WBS show that there was a relapse of CFS when pregnancy was diagnosed (4 weeks following LMP). The WBS remained low in the first and second trimester and she remained bed bound most of the time except for two episodes of higher energy levels, one of them

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corresponded to the booking ultrasound scan at 14 weeks. As pregnancy progressed her CFS improved and despite the energy required to care for a newborn baby and breast feeding she continued to improve in the puerperium with WBS rising to 5. The sleep pattern generally corresponded to her well being scores.

Discussion

We report a detailed description of pregnancy associated with severe chronic fatigue syndrome (CFS). CFS is a symptom-complex of unknown aetiopathogenesis without specific markers and the diagnosis is based on clinical criteria. The illness is characterised by the onset of persistent or relapsing fatigue, severe enough to reduce daily activity below 50% of the patients pre-morbid activity level for a period of at least 6 months (Holmes *et al.*, 1988).

The patients are predominantly women, between 20 and 40 years of age (McCully *et al.*, 1996; Cannon and St Pierre, 1997). In about two-thirds of cases there is a history of an initial respiratory infectious illness often with symptoms of sore throat (Tyrrell, 1994). It is a very variable disease and the severely affected individuals are bedridden with profound fatigue and weakness. They experience 'relapses' of severe symptoms following even moderate levels of exercise. The first visit to the hospital precipitated enormous fatigue in this case and it took 2 weeks to recover. Despite this, most studies report that CFS patients have normal muscle strength as we also found. CFS does not neatly fit into the conventional view that disease is either 'physical' or 'psychological'. Instead it is the end stage of a multifactorials process. A greater understanding is required of factors that predispose individuals to develop the disorder and those that perpetuate disability (Wessely, 1996).

Patients always believe they are suffering from an organic medical disorder (Matthews *et al.*, 1991), an opinion not always shared by their doctor. Establishing and maintaining support, having a flexible approach and demonstrating a personal concern for the patient is essential.

We adopted an 'holistic' approach in the care of this woman's pregnancy and encouraged her to keep the WBS and sleep diary. We also encouraged the belief that hormonal changes assocaited with pregnancy would improve CFS. Despite evidence to suggest that expectant mothers experience increasing levels of fatigue as pregnancy progresses, particularly in the third trimester and postpartum period (Carty *et al.*, 1996; Waters and Lee, 1996; Elek *et al.*, 1996) we observed a decrease in fatigue in the third trimester and puerperium in this case. This may indicate a gradual recovery with adoption of the maternal image which fulfils the most primal bodily and psychic modes of life and enhances self image (Holland, 1997).

The necessity for assistance with the second stage of labour was predictable as the voluntary component of the delivery process was beyond the capabilities of this patient. The involuntary component of uterine activity was probably normal in view of a normal duration of the first stage of labour.

CFS is a poorly understood disorder. This case provides an example for the positive outcome of pregnancy associated with a medically unexplained illness in general. As far as we are aware, this is the first reported case of pregnancy associated with severe CFS in the United Kingdom.

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