Restless legs syndrome in pregnancy

Case reports

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Summary: Restless legs syndrome is a common complaint in pregnancy affecting up to one in every three women. The exact pathophysiology is poorly understood. The majority of patients respond to simple explanation and reassurance, however, a small proportion may suffer debilitating symptoms requiring drug therapy. We describe two such cases.

Key words: pregnancy; restless legs syndrome.

CASE REPORTS

Patient No. 1. Mrs G.C. known to suffer from restless legs syndrome had an uncomplicated prengancy up until 29 weeks gestation when she had a severe exacerbation. In her three previous pregnancies she had experienced similar exacerbations, particularly in the third trimester, but had required no therapy.

She described her symptoms as being like "electrical pins and needles" causing a constant urge to move her legs when at rest and especially at night. As a result she was not sleeping well and was becoming depressed. Temazepam, amylobarbitone and diazepam were all unsuccessful in controlling her symptoms. At 36 weeks she was commenced on carbamezepine and within 48 hrs had dramatic relief from her symptoms. She remained asymptomatic and went into labour at term and had an uneventful delivery. She remained on carbamazepine for 2 weeks post partum and on stopping the treatment had no immediate recurrence of symptoms.

Patient No. 2. Mrs H. in her first pregnancy at 34 weeks gestation complained of a constant "fidgety" feeling in her legs. She also described the classical unpleasant crawling sensation deep in her legs and having a constant need to move her legs especially when trying to sleep. Treatment with diazepam and temazepam produced no relief. Within 2 days of commencing carbamazepine she noted a dramatic improvement. Treatment was continued up until delivery which was uncomplicated. There were no recurrences in the puerperium. Serum folate, iron and ferritin levels were normal in both patients.

DISCUSSION

The restless legs syndrome affects up to 5% of the population at some time (Clough 87). Little information is available about this syndrome in pregnancy. On direct questioning the incidence has been estimated to range from 11-27% (Ekbom 1945, Jolivet 1953). In those patients where symptoms were present before pregnancy, 50% of them had an exacerbation during pregnancy. The first deteiled study of the syndrome was reported by Ekbom (1944).

The classical symptom is peculiar creeping sensations most frequently limited to the lower leg but often present in the thighs also. As a rule it is symmetrical but may be unilateral.

It is usually worse in the evenings or at rest. Patients often give vivid descriptions of sensation felt in their legs such as "leg full of worms" "ants running up

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and down" "like an internal itch" (Ekbom 1970). All patients are unable to keep the legs still when these sensations are present. A small proportion of patients with severe symptoms will have significant disruption of their lives.

The pathophysiology of the restless legs syndrome is unknown. There are no pathological abnormalities of muscle or nerve and consequently neurological examination is unremarkable. The diagnosis is based purely on history.

The aetiology is unclear but there are certain associations with pregnancy, iron deficiency and uraemia. Other possible aetiological factors include heredity, depressive states, carcinoma, gastrectomy, infectious disease, varicose veins, cold amyloidosis, rheumatoid arthritis, and folic acid deficiency (Asp-Upmark 1959, Callaghan 1966, Ekbom 1970, Gibb and Lees 1986).

In pregnancy the symptoms generally appear during the second half of pregnancy and usually disappear soon after delivery. Some women have creeping sensations in their legs during each pregnancy but never otherwise. Others notice that their complaints become worse during pregnancy as in the first case. Folic acid deficiency has been suggested as a cause in some pregnant women (Botez and Lambert, 1977). A marked improvement with iron therapy has been noted in patients with iron deficiency anaemia (Ekbom, 1970), however, most patients with restless legs have normal iron levels.

Restless legs syndrome is usually a trivial complaint and many patients will not require drug treatment. Simple reassurance on the benign nature of the disease, in addition to massage, flexion-extension movement, raising the feet higher than the waist, and walking about may well suffice. Iron or folic acid deficiency should be corrected. Vasodilators, ascorbic acid, propranolol, clonidine, carbamazepine, triazolam, diazepam, clorazepam, methylsergide, tryptophan, chlorpromazine, amytriptyline, levodopa and procaine infusions have all been reported to abate symptoms. Few double blind studies have been done but both carbamazepine and clonidine were significantly more effective than placebo in the non pregnant situation. (Tetstad *et al.* 1984, Handwerker and Palmer 1985).

In pregnancy it is important that doctors be aware to this sometimes distressing complaint. Simple sympathetic reassurance and exercises will suffice in the majority. In severe cases where sleep is significantly interrupted a trial of diazepam or carbamazepine should be considered.

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