Treatment and Prophylaxis of Anaemia of Pregnancy with 'Fefol Spansule'

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Abstract

Fifty seven consecutive patients, all less than 18 weeks pregnant and attending the antenatal clinic for the first time, were treated with 'Fefol Spansule' (Ferrous Sulphate+ Folic Acid timed-release) Capsules. Seven patients failed to attend the subsequent follow-up clinic appointments. The remaining fifty patients showed a mean rise in haemoglobin of 0.7g/l00ml and 1.4g/l00ml at 23-30 weeks and 36-38 weeks respectively. There were no gastrointestinal or other side effects and all the patients preferred the simple once a day dosage regimen. We conclude that 'Fefol Spansule' (Ferrous Sulphate+Folic Acid timed-release Capsules) are effective in the prophylaxis as well as treatment of anaemia of pregnancy (JPMA 32.43, 1982).

Introduction

It is well-known that demaaid for both Iron and Folic Acid increases during pregnancy and that Iron deficiency anaemia and, to a lesser extent, anaemia secondary to Folic Acid deficiency are common even in the developed countries (Warner and Edward 1964; Chanarin et al 1968; Aistead et al 1971; Girdwood 1969; Girdwood 1967). Supplements of these two elements are, therefore, routinely given for prophylaxis as well as treatment of these anaemias. The present study was conducted, firstly to assess the extent of the problem in a comparatively well-off urban community in a developing country and, second, to assess the value of 'Fefol Spansule’ Capsules-a ‘timed-release’ preparation containing Ferrous Sulphate and Folic Acid-in the prophylaxis as well as treatment of these two conditions.

Material and Methods

Fifty seven patients entered the trial. All were less than 18 weeks pregnant and attending the antenatal clinic for the first time. Full medical and obstetric history was recorded and physical examination carried out. Haemoglobin levels were done routinely an all patients at First attendance, at Second attendance (28-30 weeks) and finally at Third attendance (36-38 weeks). All patients having a haemoglobin less than 11.0g/l00 ml (75%) had a full blood count and blood films done. Side effects or gastrointestinal symptoms occuring during therapy were recorded. The acceptability of the patients in terms of taking one capsule against t.i.d. or q.i.d. dosage regimen were recorded. Social class of the patient based on the family’s monthly income was also noted. As mentioned previously seven patients failed to attend the subsequent follow-up clinics (four after the First attendance and three after the second attendance). These were excluded from the final analysis of the results.

Results

Of the fifty patients who completed the trial, tile mean age was 26.5 years (range 16-40 years), and the mean number of previous pregnancies 2.3 (range 0-8 pregnancies). Nineteen belonged to social class IV (monthly income below Ks. 250/-), eighteen belonged to social class III (monthly income Rs. 250/-
to Rs. 500/-), thirteen belonged to class II (monthly income Rs. 500/- to Rs. 1500/-) and none to class I (above Rs. 500/-). The number of patients having haemoglobin less than 11.1 g/100 ml was twelve. Of these one (with initial haemoglobin 7g/l00 ml) showed a megaloblastic picture on blood film while one showed a mixed Iron deficiency and megaloblastic picture (her initial haemoglobin was 9.4g/l00 ml). All the others showed a microcytic hypochromic picture typical of Iron deficiency anaemia. Only two patients were given two capsules/day, the rest all received one capsule/day. All the patients preferred the once daily dosage schedule as against t.i.d. or q.i.d. dosage regimen. Only one patient developed diarrhoea which lasted for one week. ‘Fefol’ was discontinued for this duration but restarted once diarrhoea stopped and she was able to complete the trial without any further gastrointestinal symptoms. It was thought that her diarrhoea was probably unrelated to ‘Fefol’ therapy. No other side-effects of any nature were noted in any patient.

The patients’ initial mean haemoglobin was 12.6g/l00 ml (range 7-14.8). At the second attendance (28-30 weeks) it was 13.3g/l00 ml (range 11.2-14.8) and at the Third attendance (36-38 weeks) 14.0g/l00 ml (range 12.8-14.8). Thus the mean rise in haemoglobin at the Second attendance was 0.7 g/100 ml and at the Third attendance 1.4 g/100 ml. The results are summarised in the Table.
Comparison of the number of patients and their haemoglobin levels, pro and post-treatment are shown below:

**Discussion**

Extensive trials have already confirmed the therapeutic efficacy of Ferrous Sulphate in ‘Spansule’ (timed-release) Capsule form in the treatment of iron-deficiency anaemia (Davis et al 1959; Kopak 1964; Sterling 1960; Hood & Bond 1960; Kramer 1962). Iron in the form of Ferrous Sulphate is the treatment of choice and Elwood and Williams (1970) have demonstrated that with an accepted therapeutic dosage of elemental iron the haemoglohin regeneration produced by Ferrous Sulphate in ‘Spansule’ Capsule form was superior on a mg for mg basis ot that produced by both conventional Iron and simple time-release preparations.

This trial was an open study and we did not employ placebo-control or blind techniques. However, it did demonstrate the excellent therapeutic as well as prophylactic value of ‘Fefol Spansule’ (Ferrous Sulphate-Folic Acid) Capsules in anaemia of pregnancy, and we would tend to agree with the findings and observations of the authors mentioned above.

**Acknowledgements**

We are grateful to M/s Smith Kline and French of Pakistan Ltd., for supplying the ‘Spansules’ and for their full cooperation during the trial.

**References**