# Anaemia as A Cause Of Infertility: Focus On Management Of Anaemia As First Line Management Of Infertility

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## Abstract

We report a series of 5 infertile couple who were seen in a free camp in India. The women were found to be clinically anaemic, treated with dietary supplements (Vitamin B12 and folic acid and Iron) 4 out of 5 couples treated conceived between 4 months and 1 year of treatment. The 5th couple is undergoing further treatments.

## INTRODUCTION

Infertility has been seen as a social stigma since dark ages and still remains to be so in the deprived and uneducated population of the developing world. Anaemia is a common manifestation of economic deprivation in societies.

Infertility has been a focus of research and groundbreaking advances have been made for its treatment. But basic clinical judgement and simple measures may still be more effective than most advanced treatment.

We report a series of 5 women complaining of inability to conceive. 4 of whom conceived with improved nutrition and only one needed any further investigations to help with infertility.

## **CASE REPORT**

5 women were reviewed in a health camp organised in a poor deprived community organised by a Charity .They had all been complaining of inability to conceive.

Clinically they all looked pale and were from low socio economic status, uneducated and a dietary history indicated a poor diet.

They all had normal menstrual history and three of five women had one or more children while two had none. Haemoglobin was accessed in the camp and was fund to be low In all cases <sup>table 1</sup> the slides indicated mixed iron and foliate  $B_{12}$  deficiency .The proposed management plan was to start with dietary supplements ( Iron and Folic acid ) and give dietary advise and a course of Albendazole ( due to high prevalence of helminthic infections ) in the first place and advise contraception for next few months as a pregnancy was not desirable with such low haemoglobin. Keeping in view the poor socio-economic status and the family dietary history, nutritional supplements were distributed for the husband and children as well and the women were advised to visit with their husbands and children on the next visit.

Check at 3 month reported improved general well being improving haemoglobin <sup>table 1</sup> treatment was continued and advise to continue contraception was given. 6 month review revealed rising haemoglobin level <sup>chart 1</sup> and 3 of 5 women were already pregnant.

One lady got pregnant 2 months later. One lady( kd ) is still under treatment and husbands sperm count was found to be low.

## DISCUSSION

Surveys suggest that 65 per cent of adult women, 75 per cent of pregnant women, 77 per cent of pre-school children, and nearly 45 per cent of adult men in India are anaemic  $_{1, 2}$ 

Perinicious anaemia and folate deficiency are known to cause secondary infertility 3747576 in both men and and women. Anaemia as a cause of infertility has been seen only in the cases of malabsorption syndromes in the developed world. In economically deprived communities of developing countries dietary deficiency anaemias are still a cause of infertility. Besides causing infertility folate deficiency may also cause increased risk of miscarriage 7

The high incidence of anaemia amongst the deprived populations of developing world makes it a common cause

of infertility. Pregnancy in a severely anaemic woman is a risk to both mother and foetus.

Any efforts to treat infertility or to even start preliminary investigations should be deferred until anaemia is treated. Empirically treating both partners for dietary deficiency was reasonable in our case as we were in a one day camp away from our base hospital, but in an other situation checking partners haemoglobin would be a better option.

Treatment of anaemia itself may resolve the infertility issues and should be taken as a first line treatment in all cases. If the couple is still unable to conceive further treatments and investigations can be planned in he healthy mother.

#### Figure 1

name	age	Gravida	Duration of infertility yrs	slide	Hb	Hb (at 3 month)	Hb (at 6 month)
kd	24	0	4	mixed	6.2	7.6	9.1
sb	29	1	3	mixed	7	8.2	9.5
rs	25	2	2	mixed	6.8	7.7	9.3
sy	23	0	3	mixed	6.1	8.3	10
ng	27	1	3	mixed	6.7	8.1	9.7



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