

# A clinical profile of male adult anaemic patients at tertiary health care centre

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## Abstract

**Background:** Anaemia is a reduction in the oxygen carrying capacity of the blood resulting in tissue hypoxia. **Aims and Objectives:** To study Clinical profile of male adult anaemic patients at tertiary health care center. **Methodology:** This was a cross-sectional study in 50 patients admitted to the medical wards of P.D.S.C.G.H. Male patients between 12 and 60 years of age, with anemia and hemoglobin of less than 7gm% were included in the study. **Result:** The age of the patients in this study ranged from 12-60 years with a means of 37.3 years. The duration of the illness ranged from 1 month to 9 years, with a mean of 10.54 months. All the patients had easy fatigability and tiredness. 60% of them had giddiness followed by shortness of breath on exertion in 42%. 8 patients had paraesthesia and all of them had a megaloblastic marrow. One patient presented with sub acute degeneration of spinal cord and a megaloblastic marrow. Overall 9 of the 21 patients (42.8%) with megaloblastic marrow had neurological symptoms on presentation. **Conclusion:** It can be concluded from our study that the most common clinical features were easy fatigability, tiredness, giddiness, shortness of breath on exertion paraesthesia etc.

**Key Words:** Anemia, easy fatigability, tiredness, giddiness, paraesthesia.

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## INTRODUCTION

Anaemia is a reduction in the oxygen carrying capacity of the blood resulting in tissue hypoxia.<sup>1</sup> Cardiac output at rest is not usually increased in most chronic anaemia until haemoglobin levels fall below 7 g/dL, but abnormal rise in output with exercise may occur with levels as high as 10 g/dL.<sup>2</sup> The increase in cardiac output has been observed to correlate well with the degree of anaemia.<sup>3</sup> Other compensatory mechanisms to chronic anaemia available to the body include decreased circulation time and increased tissue oxygen uptake. The latter is facilitated by a shift to the right of the oxygen

haemoglobin dissociation curve.<sup>4,5</sup> Cardiomegaly may also be as a result of the increased workload on the heart from the increased viscosity of blood in anaemia patients.<sup>6</sup> Anaemia in the elderly is an extremely common problem that is associated with increased mortality and poorer health-related quality of life, regardless of the underlying cause of the low haemoglobin.<sup>7,8</sup> A study of anaemia in elderly patients found a wide variation in prevalence ranging from 2.9% to 61% in men and 3.3% to 41% in women. Higher rates were found in hospitalised patients than in community dwellers.<sup>9</sup>

## MATERIAL AND METHODS

This was a cross-sectional study in 50 patients admitted to the medical wards of P.D.S.C.G.H. Male patients between 12 and 60 years of age, with anemia and a hemoglobin of less than 7gm% were included in the study. All the female patients and male patients not in the specified age group. Patients diagnosed as having renal and on treatment were excluded from the study. Patients who already had diagnostic work up elsewhere, and on treatment were excluded from the study. All the patients were subjected to a details history and physical examination. Their social and dietary habits were

enquired. The details were recorded in the proforma. All the patients underwent a series of diagnostic investigations. They were hemogram, ESR, blood urea, blood sugar, serum creatinine, serum electrolytes, complete urine examination, stool for ova and cysts, stool for occult blood and a chest X-ray additional investigations were done as required in the case for the establishment of diagnosis.

## RESULT

**Table 1:** Distribution of the Patients as per the age

Age group	Number of case	% age of total
12-19	10	20
20-29	13	26
30-39	10	20
40-49	8	16
50-59	9	18

The age of the patients in this study ranged from 12-60 years with a means of 37.3 years.

**Table 2:** Distribution of the patients as per the duration of illness

Duration of illness	Number of cases	% age of total
<1 month	11	22%
1-3 months	11	22%
3-6 months	9	18%
6-12 months	4	8%
>1 years	15	30%

The duration of the illness ranged from 1 month to 9 years, with a mean of 10.54 months before presentation of the hospital, the range is very wide due to the varied etiological categories in the study.

**Table 3:** Distribution of the patients as per the clinical features

Symptoms	Number of patients	% age of total
Fatigue	50	100
Tiredness	50	100
Giddiness	30	60
Dyspnea	21	42
Fever	21	42
Weight loss	16	32
Palpitations	14	28
Abdominal pain	12	24
Oedema	10	20
Bleeding Diathesis	10	20
Paraesthesia	8	16
Chest pain	7	14
Jaundice	6	12
Diarrhea	3	6
Blood Loss	3	6
Focal neurology deficit	1	2

All the patients had easy fatigability and tiredness. 60% of them had giddiness followed by shortness of breath on exertion in 42%. 8 patients had paraesthesia and all of them had a megaloblastic marrow. One patients presented with sub acute degeneration of spinal cord and a megaloblastic marrow. Overall 9 of the 21 patients (42.8%) with megaloblastic marrow had neurological symptoms on presentation. The varied symptomatology in the study might be due to the varied etiological categories. This was similar to K. G. Prakash *et al.* The most common presentation was easy fatigability in 44(88%) patients, followed by dyspnoea in 35(70%) and giddiness in 30 (60%) patients

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## DISCUSSION

According to WHO, anaemia in adults is defined as haemoglobin concentration less than 12 g/dL (7.5 mmol/L) in women and less than 13 g/dL (8.1 mmol/L) in men<sup>11</sup>. Recent population-based surveys have renewed the debate and ascertained the rising prevalence of anaemia in elderly to be a “public health crisis”<sup>12</sup>. Prevalence rates of anaemia in elderly patients vary widely in community dwelling and institutionalised populations. The third National Health and Nutrition Examination survey conducted one of the most comprehensive study of geriatric anaemia in the total US population (1988-1994) which revealed the prevalence of anaemia as 11% in men and 10.2% in women aged 65 years and older<sup>13</sup>. The prevalence of anaemia increased significantly with age, up to 26.1% in men and 20.1% in women aged 85 years and over. Approximately one-third of elderly patients were found to have nutritional anaemia, one-third of the population had anaemia of chronic disease, and the remaining one-third remained unexplained. Hospital based observational studies from India had shown the prevalence rate of anaemia varying from 37.8% to 71%<sup>13,14,15</sup>. In our study we have seen that The age of the patients in this study ranged from 12-60 years with a means of 37.3 years. The duration of the illness ranged from 1 month to 9 years, with a mean of 10.54 months. All the patients had easy fatigability and tiredness. 60% of them had giddiness followed by shortness of breath on exertion in 42%. 8 patients had paraesthesia and all of them had a megaloblastic marrow. One patients presented with sub acute degeneration of spinal cord and a megaloblastic marrow. Overall 9 of the 21 patients (42.8%) with megaloblastic marrow had neurological symptoms on presentation. The varied symptomatology in the study might be due to the varied etiological categories. This was similar to K. G. Prakash *et al.* The most common presentation was easy fatigability in 44(88%) patients, followed by dyspnoea in 35(70%) and giddiness in 30 (60%) patients

## CONCLUSION

It can be concluded from our study that the most common clinical features were easy fatigability, tiredness, giddiness, shortness of breath on exertion paraesthesia etc.

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