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Anaemia in College Going Girls

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In CBC analysis of blood enthrocytes of randomly selected 61 college going girls, 39 were anaemic (63.93%), and the remaining 22 girls (36.07%) were non-anaemic. Among the 63.93% of anaemic girls, 3 were microcytic hypochromic (7.69%), 4 were macrocytic normochromic (10.25%), 8 were macrocytic hypochromic (20.51%) and 24 were normocytic normochromic (61.54%).

Key words:- *Anaemia, CBC, Hb, RBC, MCV, PCV, MCHC, MCH.*

Introduction : The term anaemia has been taken from ancient greek word 'anaimia' meaning lack of blood (^ab MedicineNet.com, ^abc Merriam). It is a state in which the amount of haemoglobin or the number of red cells in the blood is below the normal limits. Anaemia is a significant public health problem in India particularly among women (Talib, V.H., 2007). Anaemia diminishes the capability of individuals and serve as the precursor of certain diseases as peptic ulcers. Anaemia during pregnancy harm both mother and foetus (Married women, children 2003-09). In the morphological approach anaemia is classified by the size of red blood cells which is of three types- (i) Macrocytic anaemia (ii) Normocytic anaemia (iii) Microcytic anaemia. The type of anaemia is determined by the value of MCV which is microcytic when MCV is below 78 fl and macrocytic if MCV is above 94fl and normocytic when MCV is in between 78 – 94fl (Raina, N. Gupta, et. al., 1996). Microcytic and macrocytic anaemias are again of two types i.e. hypochromic, in which MCHC is below normal or below 30% and normochromic in which MCHC is normal or between 30-33%. Normocytic anaemia is always normochromic.

Material and Method :

The study has been conducted in Patna especially in the Raja Bazar and Ashiana Nagar area. We had randomly selected 61 college going girls (age 16 – 25 years) of same socio economic strata and had no health problems in the past one year. Blood samples of these girls were collected after 15 days from the flow of menstrual cycle and analysed for the presence or absence of anaemia. For diagnosis of anaemia, the CBC test provides critical information on the size, volume and shape of red blood cells (erythrocytes). The result was processed on computer in MS-Excel for statistical analysis.

Results & Discussion :

In our study of 61 selected college going girls on the basis of their CBC analysis, 39 girls (63.93%) out of 61 were found to be anaemic; and the remaining 22 girls (36.07%) were non-anaemic. Among the 63.93% of anaemic girls, 3 suffered from microcytic hypochromia (7.69%), 4 from macrocytic normochromia (10.25%), 8 from macrocytic hypochromia (20.51%) and 24 from normocytic normochromia (61.54%). The severity of anaemia varies; in 23.07% of anaemic girls it was most severe, in 12.83% it was moderate, and in the remaining 64.01% it was milder in nature.

Conclusion :

The Study shows that the large number of girls suffered from haemorrhagic anaemia and hypoplastic–aplastic anaemia. Normocytic anaemia is most common among the selected girls, whereas microcytic anaemia is least found.

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Referneces :

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