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IDIOPATHIC HYPEREOSINOPHILIC SYNDROME – A CASE REPORT

General Medicine

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ABSTRACT

IDIOPATHIC HYPEREOSINOPHILIC SYNDROME is a rare hematological disorder with clinical heterogeneity. It is characterized by peripheral blood eosinophilia of unknown origin exciding 1.5X109/L persisting at least for 6 months.
We here in report a case of 45 yr old male who had abdominal discomfort and hrepatosplenomegaly with hypereosinophilia with the absolute eosinophil count of 35.2X109/L,and was diagnosed as a IHES based on clinical features and hematological findings.

KEYWORDS

Idiopathic Hypereosinophilic Syndrome

INTRODUCTION :

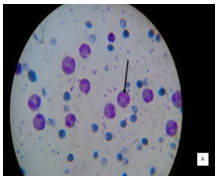
It is defined as eosinophilia > 1.5X10 /L persisting at least for 6 months, for which no underlying cause can be found and is associated with signs of organ involvement and dysfunction [1].

It is a rare entity, the true incidence of which is not known due to its overlapping features with chronic eosinophilic leukemia, not otherwise specified [1]

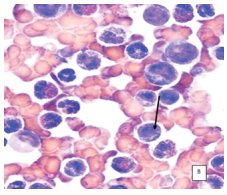
CASE REPORT:

A 45year old Male, presented with symptoms of abdominal discomfort since 15 days.On examination there was pallor and hepatosple nomegaly.Routine hemogram showed esosinophilia .No history of parasitic infection, drug reaction or allergy was noted. Stool examination for parasite and other relevant investigations were unremarkable.

Hemogram done on day showed total count of $45X10^9$/L, and absolute eosinophil count of $35.2X10^9$/L respectively. Hemogram before 1 year showed total count of $52X10^9$/L and absolute eosinophil count $23X10^9$ /LThe patient was hospitalized. Peripheral Smear showed Hyposegmented eosinophils and eosinophilic myelocytes. and bone marrow aspiration revealed hypercellular marrow with increase number of eosinophilic precursor, without disproportionate increase in myeloblasts and normal erythropoiesis and megekaryocytopoiesis.



FigureA) Peripheral Smear: Hyposegmented eosinophils and eosinophilic myelocytes.



B) Bone marrow :Hypercellular marrow with increased eosinophil precursors

Based on clinico-hematological findings, diagnosis of idiopathic hypereosinophilic syndrome was made and He was started on tapering dose of prednisolone for a period of one month.The patient has been asked to follow uo after one month.

DISCUSSION:

The term hypereosinophilic syndrome was first coined in 1968 to regroup patients with a number of closely related disorders all characterized by chronic increase in peripheral blood eosinophil levels and organ damage related to eosinophilic infiltration [2]. Current definition of Idiopathic HES was proposed by chusid in 1975 stating that eosinophilia > $1.5X10^9$/L persisting at least for 6 months, for which no underlying cause can be found and is associated with signs of organ involvement and dysfunction [2-4]. In 2001, the WHO adopted a stepwise approach for Categorizing eosinophilia into primary, secondary (reactive), and idiopathic [3]. IHES is a rare entity, the true incidence of which is not known due to its overlapping features with Chronic eosinophilic leukemia, not otherwise specified [1]. It usually affect adults between the ages of 20 and 50 years with Male:Female ratio of 9:1 [2,4]. It is a multisystem disorder with invariable involvement of Bone Marrow and Peripheral Blood. Hepatospl enomegaly is not uncommon and seen in 30-50% cases [1].Other systems like central nervous system, heart, skin and gastrointestinal tract may also involve. Peripheral Smear shows mature eosinophilia with occasional eosinophilic myelocytes.

Neutrophilia and monocytosis often accompanies eosinophilia. Bone marrow reveals marrow with increase number of eosinophilic precursor, without disproportionate increase in myeloblasts and normal erythropoiesis and megekaryocytopoiesis [1].

Diagnosis of IHES is based on following criteria [1,5], there is an eosinophil count of >1.5X109/L persisting for at least 6 months.

CONCLUSION:

IHES is a rare hematological disorder with clinical heterogeneity. It is characterized by peripheral blood eosinophilia of unknown origin exciding 1.5X109/L persisting at least for 6 months. Present case was diagnosed as a IHES based on clinical features and hematological findings.

REFERENCES

1. Bain BJ, Gilliland DG, Horny H-P, Vardiman JW. Chronic eosinophilic leukaemia, not otherwisespecified. In: Swerdlow S, Harris NL, Stein H, Jaffe ES, Theile J, Vardiman JW, editors. World Health Organization classification of tumours. Pathology and genetics of tumours of haematopoietic and lymphoid tissues. Lyon, France: IARC Press; 2008. pp. 51–53.

2. Roufosse F, Goldman M, Cogan E; Idiopathic hypereosinophilic syndrome; Orphanet encyclopedia 2004.
3. Gotlib J; Eosinophilic myeloid disorders: new classification and novel therapeutic strategies; Curr Opin Hematol 2010; 17: 117–124.
4. Weller PF and Bubley GJ; The idiopathic hypereosinophilic syndrome; Blood; 1994; 83: 2759- 2779
5. Fletcher S, Bain B; Diagnosis and treatment of hypereosinophilic syndromes; Curr Opin Hematol 2007; 14: 37–42.