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**Case report**

**Triple Threat: Anemic Trio - Megaloblastic Anemia, Iron Deficiency Anemia And Hemolysis In A 64 Year Old Male**

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**Abstract:**

A 64 year old male presented with complaints of generalised weakness and easy fatiguability for the past 1 year being treated for symptoms on & off. On examination, patient was pale& ictericwith no other abnormality noticed. Routine blood investigations done which showed Hb-4.5 g/dL, PCV-14.5, red cell distribution width-28.6%,MCV-125fL, MCH-38.8pg, MCHC-31g/dL, elevated total bilirubin-2.9mg/dL, Direct Bilirubin-1.1mg/dL, Indirect Bilirubin-1.8mg/dL. Serum Iron-31ug/dL, Serum Transferrin Saturation-10%, Serum LDH-1339U/L, Serum Haptoglobin-110mg/dL, Serum Vit B12-50pg/ml, Reticulocyte Count was 20%, ANA- weekly Positive, direct coombs test was negative. Peripheral blood smear showed,“Marked anisocytosis, poikilocytosis with predominantly macrocytic,normochromic with macroovalocytes,elliptocytes,tear drop cells and polychromatic macrocytes and occasional nRBC’s, fragmented RBC’s seen with mild thrombocytopenia”. Bone marrow aspiration done which showed,“Erythroid series of cells with micronormoblastic and megaloblastic maturation with few scattered leucocytes”. The patient was diagnosed with hemolytic anemia secondary to vitamin B12 deficiency with concomitant iron deficiency anemia.

**Keywords:** Vitamin B12, Iron Deficiency Anemia, Hemolysis, nRBC’s, Macro-ovalocytes, Megaloblastic Maturation, Coomb’s test, LDH