

HEMATO-ONCOLOGY

MEGALOBLASTIC ANEMIA - AN UPDATE

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Abstract: *Megaloblastic anemia is a multisystem disorder, which can easily be diagnosed with high index of suspicion. A complete blood count and review of blood and bone marrow films reflect the typical pathognomonic cytologic appearance of megaloblastic anemia. Assessment of metabolites like serum homocysteine and methylmalonic acid in the serum or in the urine is considered to be more sensitive and specific whereas serum cobalamin and folate levels are of limited value. It is highly amenable to therapy once the primary cause is established. Appropriate replacement therapy of deficient nutrient, cobalamin or folate or both, easily corrects the anemia.*

Keywords: *Anemia, Megaloblast, Replacement therapy, Children.*

Points to Remember

- *Vitamin B12 and folic acid deficiencies are the leading causes of megaloblastic anemia.*
- *Vitamin B12 deficiency may present with pancytopenia, hemorrhagic manifestations and fever, thus mimicking diseases like aplastic anemia or acute leukemia.*
- *Homocysteine is increased in both folate and vitamin B12 deficiency but serum MMA is increased in vitamin B12 deficiency only.*
- *Apart from an anemic syndrome, patients with vitamin B12 deficiency may also present with neurologic symptoms.*
- *Treatment of folate deficiency with folic acid supplements should be initiated after ruling out concomitant vitamin B12 deficiency as it increases the risk neurological and neuropsychiatric disorders.*
- *Hypokalemia and iron deficiency can occur during treatment of severe megaloblastic anemia.*

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