

Children's Wisconsin Clinical Nutrition Department

GI - IBD: Micronutrient Case Study

Mario is a 14 year old male who was just diagnosed with Crohn's disease. He was started on steroids to induce remission and has had no surgical intervention. Family has not decided what maintenance medication he will start. He is tolerating an oral diet. Family reports he has good medication compliance.

Anthropometrics:

8/24/21: 33.2 kg

Labs From 8/24/21 (diagnosis):

Ferritin	Latest Ref Range: 10 - 300 ng/mL	10.9
Iron Blood	Latest Ref Range: 44 - 142 ug/dL	18 (L)
Iron Binding Capacity	Latest Ref Range: 224 - 435 ug/dL	195 (L)
% Saturation	Latest Ref Range: 13 - 45 %	9 (L)
25 OH Vitamin D Total	Latest Ref Range: 30.0 - 100.0 ng/mL	16.0 (L)
Hemoglobin	Latest Ref Range: 12.5 - 16.1 g/dL	7.5 (L)
Hematocrit	Latest Ref Range: 36.0 - 47.0 %	28.5 (L)

Questions:

- What supplements would you start the patient on based on these labs?
 - IV iron due to low % iron saturation. IV iron should be used over oral iron as his Hemoglobin <10 which is considered moderate to severe anemia
 - Vitamin D since level is <30
- Should be started on a multivitamin in addition to other supplements? What type of multivitamin?
 - Yes, use a prenatal multivitamin as he is greater than 9 years old
- Are there other micronutrient labs that should be monitored as he has Crohn's disease?
 - Zinc should be checked annually for all Crohn's patients
- When should micronutrient labs be checked next? And which labs should be checked?
 - Repeat CBC and iron studies 1-3 months after starting supplementation
 - Recheck Vitamin D 3-6 months after started supplementation