UVM Health HEMATOLOGY **ANEMIA** REFERRAL/CONSULT

This Enhanced Referral is NOT for people who are actively bleeding. Hematology does not manage acute blood loss anemia.

Background:

- Anemia is common in the general population, especially in elderly individuals (over 6%) and usually this is not a primary bone marrow process but a reflection of the overall health of an individual.
- Management of anemia ,not due to a primary bone marrow process or hemolytic anemia, is through managing the underlying condition and/or repleting nutritional deficiencies. Most causes of anemia can be managed through a primary care or other providers (i.e. iron deficiency due to menorrhagia)

Purpose:

- To identify patients who would benefit from urgent hematology referral.
- To allow for timely treatment of anemia.

Laboratory studies (within the prior 3 months):

- In every patient: Complete Blood Count with differential, reticulocyte count, TSH, Comprehensive metabolic profile, ferritin, B12, folic acid, LDH, and haptoglobin
- If B12 <300 but > 200, then check methylmalonic acid.
- if LDH elevated or haptoglobin low, send Direct Coombs (DAT) and type & screen

If the patient has an eGFR <60 (and not on dialysis):

Laboratory Studies (In addition to the ones listed above):

- Monoclonal Protein Diagnostic Panel (if positive, see MGUS referral guidance)

Managing Nutritional Deficiencies and Organ Dysfunction

Iron deficiency (Ferritin <50) – see iron deficiency guidance.

- Evaluate for cause of deficiency and address
  - Poor absorption (e.g., Celiac Disease, Atrophic Gastritis, Gastric Surgery, parasites)
  - Blood loss (e.g., gastrointestinal, genitourinary, gynecologic, iatrogenic (blood donation))
  - Iron deficient diet (vegan, vegetarian, malnutrition)
- Start replacement with oral or IV iron
- Monitor with CBC and ferritin levels over time, and adjust replacement as appropriate

B12 Deficiency (B12 < normal, or indeterminant B12 level and elevated methylmalonic acid)

- Evaluate for cause of deficiency and address
  - Poor absorption (e.g., Celiac Disease, pernicious anemia, atrophic gastritis, gastric surgery)
  - Inadequate diet: this is rare, but can occur with a strict vegan diet

- Start replacement immediately either oral (1000mcg daily) or parental
- Iron and folate deficiency can develop with treatment of B12 deficiency

Folate Deficiency

- Evaluate for cause of deficiency and address
  - Poor absorption (e.g., Celiac Disease, atrophic gastritis, alcoholism, gastric surgery)
  - Gluten-free diet (flour replacements are not fortified with folic acid)
- Start replacement: folic acid 1-5mg orally daily

Hypothyroidism or Hyperthyroidism

- Manage as appropriate and evaluate hemoglobin with treatment

Please call Hematology consult attending through PAS (802 847-2700) to expedite a referral if these studies reveal any of the following:

- Concern for bone marrow infiltration from cancer or a hematologic malignancy (abnormal circulating cells)
- There is evidence of hemolysis (low haptoglobin, high LDH, antibody detected on DAT)