Inclusion Criteria: Menstruating females with concern for heavy bleeding

Exclusion Criteria:
- Previously identified bleeding disorder (Rheumatology, Cancer, Anti-Coagulation, Congenital Heart Disease)
- Patients with altered mental status, severe hypotension, requiring intubation, or who are otherwise clinically unstable

Screening Questions (Adapted from Claire Philipp Screening tool; AMJOG 2011)

1. On average does your period last 7 or more days?
2. Do you experience “flooding” or overflow bleeding through your tampon or pad?
3. Do you need to change your tampon or pad more than every 1-2 hours at times during your period?
4. Have you ever been treated (PO iron, IV iron, blood transfusion) for iron deficiency anemia in the past?
5. Do you have a family history of a bleeding disorder?
6. Have you had excessive bleeding with a dental extraction or dental surgery?
7. Have you had excessive bleeding with a miscarriage or following delivery of a child?

Considered to be positive if answered yes to any of the above questions

Algorithm

Concern for Heavy Menstrual Bleeding or Positive Screening
Consult Hematology if known history of blood thinners

- Ask and document screening questions (smartphrase .hmb)
- Obtain CBC and Urine Pregnancy Test for all patients.
- Additional work-up, if indicated (See Box 1 on page 2)

No Anemia
Hgb ≥12

Actively Bleeding?

Yes
- Discharge for outpatient follow-up with MAINTENANCE hormone therapy (see Table 1)

No
- Discharge for outpatient follow-up
- No hormone therapy needed

Mild to Moderate Anemia
Hgb 8-11.9

Symptomatic Anemia?

Yes
- Transfer to ED

No
- Actively Bleeding?

Yes
- Discharge for outpatient follow-up with TAPER hormone therapy (see Table 1)
- Add ferrous sulfate for Hgb <10

No
- Discharge for outpatient follow-up with MAINTENANCE hormone therapy (see Table 1)
- Add ferrous sulfate for Hgb <10

Severe Anemia
Hgb <8

Transfer Criteria

- Hgb <8
- Soaking >6 ppd
- Symptomatic anemia
- If unstable, severely hypotensive, or Hgb <5, consider ambulance transfer.

Discharge Instructions

- See Table 1 for discharge meds
- Follow-up with a Gynecologist in the CHOA Pediatric Gynecology clinic (404.785.1491), or in the Hughes Spalding Adolescent Medicine Clinic (404.785.9850) in 2-4 weeks
- Follow-up with the Hematology Clinic (404.785.1319) in 4-8 weeks to complete bleeding disorder workup
- If bleeding recurs, return to previous dose and call PCP. Skip placebo pills until seen for follow-up.
- Iron supplementation if indicated and encourage iron rich foods
- Provide teaching sheet: “When Your Child Has Iron-Deficiency Anemia.”

Definitions
- ppd = pads per day

General Care
- Monitor vitals per routine
- Start IV if indicated

1 Symptoms of Anemia
- Tachycardia
- Orthostatic Hypotension
- Headache/Dizziness
- Acute fatigue

2 Transfer Criteria

- Hgb <8
- Soaking >6 ppd
- Symptomatic anemia
- If unstable, severely hypotensive, or Hgb <5, consider ambulance transfer.

3 Discharge Instructions
- See Table 1 for discharge meds
- Follow-up with a Gynecologist in the CHOA Pediatric Gynecology clinic (404.785.1491), or in the Hughes Spalding Adolescent Medicine Clinic (404.785.9850) in 2-4 weeks
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- Iron supplementation if indicated and encourage iron rich foods
- Provide teaching sheet: “When Your Child Has Iron-Deficiency Anemia.”
Box 1: Additional Lab Work-up (if indicated)

- If Obesity (BMI ≥95%), Acanthosis Nigricans, Hirsutism, or missed period for more than 3 months in a row:
  - Prior to starting hormone therapy, draw FSH, LH, Estradiol, Prolactin, Testosterone. Results not needed prior to starting therapy.
  - Consider: Urine GC/Chlamydia, Serum RPR and HIV if sexually active

<table>
<thead>
<tr>
<th>Table 1: Discharge Medications</th>
<th>Indications</th>
<th>Dosage</th>
<th>Max Dose</th>
<th>Comments</th>
<th>Prescription Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norethindrone Acetate</td>
<td>Preferred</td>
<td>TAPER: 10 mg BID until 3 days after bleeding stops. Then, start maintenance dose <strong>MAINTENANCE:</strong> 10 mg once a day until follow-up appointment.</td>
<td>10 mg/dose</td>
<td>Contraindication: Previous intolerance</td>
<td>Lo-ovral: Prescribe as a 1-month supply with 3 refills</td>
</tr>
<tr>
<td></td>
<td>Alternate if: Norethindrone is contraindicated</td>
<td>TAPER: 1 tab PO Q8H x 3 days from initiation - Then, 1 tab PO Q12H x 2 days. - Then, start maintenance dose <strong>MAINTENANCE:</strong> 1 tab PO QD until follow-up.</td>
<td>1 tab/dose</td>
<td>Alternate for Medicaid Patients: Seasonique (uses same dosing schedule as Lo-Ovral) Common Contraindications: Personal history of thrombosis or stroke, thrombosis in first degree relative or family history of hypercoagulability, migraine with aura, SBP &gt;160 or DBP &gt;100, &lt;6 weeks post-partum, congenital heart disease, active cancer, renal failure, or uncontrolled rheumatologic disease.</td>
<td>Seasonique: Prescribe 1 (84-pill) pack with 1 refill</td>
</tr>
<tr>
<td>Medroxyprogesterone</td>
<td>Alternate if: Norethindrone acetate and Lo-Ovral are contraindicated</td>
<td>TAPER: 20 mg BID until 3 days after bleeding stops, then start maintenance dose <strong>MAINTENANCE:</strong> 20 mg once a day until follow-up appointment.</td>
<td>20 mg/dose</td>
<td>Contraindication: Previous intolerance</td>
<td>Prescribe as 90 tabs for 30 days with 1 refill</td>
</tr>
</tbody>
</table>

Discharge Medications:
- Ferrous Sulfate if Hgb <10 325 mg (65mg elemental iron) PO BID N/A Prescribe 60 tabs for 30 days with 1 refill
- Ondansetron (Zofran) For side effects related to oral hormone therapy 0.15 mg/kg PO Q8H x 4 days, then 0.15 mg/kg PO Q8H PRN 8 mg/dose N/A Prescribe per patient's needs
- Famotidine (Pepcid) For side effects related to oral hormone therapy 10-20 mg PO Q12H 20 mg/dose N/A Prescribe per patient's needs
- Docusate (Colace) if iron given 50-100 mg PO QD 100 mg/dose N/A Prescribe per patient's needs

*Refer to CDC Summary of Medical Eligibility Criteria for Contraceptive Use for complete list of contraindications for estrogens
**If bleeding recurs, return to previous dose and call PCP. Skip placebo pills until seen for follow-up.