Focused Topics for The Adolescent Patient

November 4, 2023

Kelsey Logan, MD, MPH, FAAP
Michele Dritz, MD, FAAP
Christopher Bolling, MD, FAAP
Whitney Casares, MD, FAAP
Objectives

By the conclusion of this activity, participants will be able to

1. List the three key action statements related to treatment of severe obesity in adolescents
2. Determine appropriate treatment for low- and high-risk ankle injuries
3. Describe three medical uses of contraceptive medications in adolescents
4. Explain the use of two medications besides oral contraceptives in the treatment of acne.
Miranda

Miranda is a black 17 yo high school junior at Perrysburg, HS. She is a female rugby player who wants to lose weight in order to be recruited for collegiate rugby. She has identified a 'goal weight' for her position as 140 lb and wants to be at that weight in a year. She currently weighs 214 lbs. She is 5’ 4” and has a BMI of 36.7 (125% of the 95th%ile BMI). Additionally, she has recently had an ankle injury that has kept her out of practice for the past 3 weeks; she continues to have pain with almost all walking and is not able to run or jump, due to pain and a feeling of instability in her ankle.

- ROS: Has been having worsening acne and irregular periods, parents have noticed her snoring more loudly over the past year
- PMHx: Tonsils out age 7 for recurrent strep
- Family Hx: Strong family Hx of hypertension and CVD
- PE(positives): BP 142/76, mild antalgic gait, apparent facial and upper back acne vulgaris, mild acanthosis of neck and axillae, some abdominal striae, wearing ankle brace on arrival, moderate swelling of the L ankle and moderate tenderness with palpation over the lateral, medial, and anterior ankle
Some Questions About Miranda

• What do you think of Miranda’s weight goal?

• What are your biggest concerns here?

• What does the new AAP Obesity Evaluation and Treatment Clinical Practice Guideline say about this case?
First, Some Thoughts about the CPG...

- 16K Abstracts Reviewed
- 1642 Full Text Articles
- 382 Studies Included
- 13 CPG Key Action Statements
- 11 CPG Consensus Recommendations
- 2 Technical Reports

15 Years Since Last Comprehensive Guidance
The Use of “Should” Within the KAS

- The words "should" and "may" used in the KAS statements in the CPG:
  - are based on the level of associated evidence
  - reflect the action that is meant to be taken based on the evidence, under what circumstances to take that action and the level of obligation to follow the evidence-based recommendation
- The use of “should” is meant to represent an intermediate level of obligation:
  - NOT a required action
  - an evidence-based recommendation that allows for some variation based on the circumstances
- Clinical decision making is undertaken in partnership with the patient/family:
  - based on a comprehensive evaluation and understanding the components of evidence-based treatment to create an individualized and tailored treatment plan that includes longitudinal care
What are clinic-based, effective treatments for obesity?

- 13 Key Action Statements
- 11 Consensus Recommendations
- Key Topics:
  - Assessment & evaluation
  - Comorbidities
  - Multiple evidence-based treatment options
Obesity is a Complex Chronic Disease

- Obesity is often an indicator of structural inequities like unjust food systems, health inequities and environmental & community factors.

- Genetics, obesity-promoting environments, life experiences combined with inequities and structural barriers to healthy living all contribute to overweight and obesity.
A Path Forward

With this new evidence, we have a clear path forward to treat the disease of obesity. In the past, it felt like all we could offer were common-sense nutrition recommendations. That is no longer the case, and treatments - safe and effective treatments - are available.

- Sarah Armstrong, MD
Evaluation & Treatment of Pediatric Obesity

Evaluation Recommendations
KAS 1. Pediatricians and other PHCPs should measure height and wt, calculate BMI, and assess BMI percentile using age- and sex-specific CDC growth charts or growth charts for children with severe obesity at least annually for all children 2 to 18 y of age to screen for overweight (BMI ≥85th percentile to <95th percentile), obesity (BMI ≥95th percentile), and severe obesity (BMI ≥120% of the 95th percentile for age and sex).
Assess Risk

Consensus Recommendation: Perform initial and longitudinal assessment of individual, structural, and contextual risk factors to provide individualized and tailored treatment of the child/adolescent with overweight/obesity.
There is compelling evidence that obesity increases the risk for comorbidities, and that weight loss interventions can improve comorbidities.

- CPG
Pediatricians and other PHCPs should evaluate children 2 to 18 y of age with overweight (BMI ≥85th percentile to <95th percentile) and obesity (BMI ≥95th percentile) for obesity-related comorbidities by using a comprehensive patient history, mental and behavioral health screening, SDoH evaluation, physical examination, and diagnostic studies.
Comorbidities Addressed Include

- Hypertension
- T2DM & Prediabetes
- NAFLD
- Dyslipidemia
Comorbidities Addressed Include

- Depression
- Obstructive Sleep Apnea
- PCOS
- SCFE
- Blount disease

Idiopathic Intracranial Hypertension
Obstructive Sleep Apnea
PCOS
SCFE
Blount disease
KAS 3. In children 10 y and older, pediatricians and other PHCPs should evaluate for lipid abnormalities, abnormal glucose metabolism, and abnormal liver function in children and adolescents with obesity (BMI ≥95th percentile) and for lipid abnormalities in children and adolescents with overweight (BMI ≥85th percentile to <95th percentile).
KAS 3.1. In children **10 y and older with overweight** (BMI ≥85th percentile to <95th percentile), pediatricians and other PHCPs **may evaluate** for abnormal glucose metabolism and liver function in the presence of risk factors for T2DM or NAFLD. In **children 2 to 9 y of age with obesity** (BMI ≥95th percentile), pediatricians and other PHCPs **may evaluate** for lipid abnormalities.
Concurrent Treatment KAS

**KAS 4:** Pediatricians and other PHCPs should treat children and adolescents for overweight (BMI ≥85th percentile to <95th percentile) or obesity (BMI ≥95th percentile) and **comorbidities concurrently.**
Laboratory and Diagnostic Screening KAS

Dyslipidemia

**KAS 5.** Pediatricians and other PHCPs should evaluate for dyslipidemia by obtaining a fasting lipid panel in children 10 y and older with overweight (BMI ≥85th percentile to <95th percentile) and obesity (BMI ≥95th percentile) and may evaluate for dyslipidemia in children 2 through 9 y of age with obesity.
Laboratory and Diagnostic Screening KAS

Prediabetes and Diabetes Mellitus

KAS 6. Pediatricians and other PHCPs should evaluate for prediabetes and/or diabetes mellitus with fasting plasma glucose, 2-h plasma glucose after 75-g oral glucose tolerance test (OGTT), or glycosylated hemoglobin (HbA1c)
Laboratory and Diagnostic Screening KAS

**NAFLD**

**KAS 7.** Pediatricians and other PHCPs should evaluate for NAFLD by obtaining an alanine transaminase (ALT) test.
Laboratory and Diagnostic Screening KAS

Hypertension

**KAS 8.** Pediatricians and other PHCPs should evaluate for hypertension by measuring blood pressure at every visit starting at 3 y of age in children and adolescents with overweight (BMI ≥85 to <95th percentile) and obesity (BMI ≥95th percentile).
## Consensus Recommendations for Other Comorbid Conditions

<table>
<thead>
<tr>
<th>Comorbid Condition</th>
<th>Consensus Recommendation</th>
</tr>
</thead>
</table>
| OSA                | • Obtain a sleep history, including symptoms of snoring, daytime somnolence, nocturnal enuresis, morning headaches, and inattention, among children and adolescents with obesity to evaluate for OSA.  
  • Obtain a polysomnogram for children and adolescents with obesity and at least one symptom of disordered breathing. |
| PCOS               | • Evaluate for menstrual irregularities and signs of hyperandrogenism (i.e., hirsutism, acne) among female adolescents with obesity to assess risk for PCOS. |
| Depression         | • Monitor for symptoms of depression in children and adolescents with obesity and conduct annual evaluation for depression for adolescents 12 years and older with a formal self-report tool. |
| Blount             | • Perform a musculoskeletal review of systems and physical examination (e.g., internal hip rotation in growing child, gait) as part of their evaluation for obesity. |
| SCFE               | • Recommend immediate and complete activity restriction, non-weight-bearing with use of crutches, and refer to an orthopaedic surgeon for emergent evaluation, if SCFE is suspected. PHCPs may consider sending the child to an emergency department if an orthopaedic surgeon is not available. |
| IIH                | • Maintain a high index of suspicion for IIH with new-onset or progressive headaches in the context of significant weight gain, especially for females. |
Evaluation & Treatment of Pediatric Obesity

Treatment Recommendations
KAS 9. Pediatricians and other PHCPs should treat overweight (BMI $\geq$85th percentile to $<$95th percentile) and obesity (BMI $\geq$95th percentile) in children and adolescents, following the principles of the medical home and the chronic care model, using a family-centered and nonstigmatizing approach that acknowledges obesity’s biologic, social, and structural drivers.
KAS 10. Pediatricians and other PHCPs should use motivational interviewing (MI) to engage patients and families in treating overweight (BMI ≥85th percentile to <95th percentile) and obesity (BMI ≥95th percentile).
Pediatricians and other PHCPs should provide or refer children 6 y and older (Grade B) and may provide or refer children 2 through 5 y of age (Grade C) with overweight (BMI ≥85th percentile to <95th percentile) and obesity (BMI ≥95th percentile) to intensive health behavior and lifestyle treatment. Health behavior and lifestyle treatment is more effective with greater contact hours; the most effective treatment includes 26 or more hours of face-to-face, family-based, multicomponent treatment over a 3- to 12-mo period.
More about IHBLT

**WHO:**
- Patient & family
- Multidisciplinary treatment team

**WHAT:**
- Health education
- Skill building
- Behavior modification & counseling

**WHEN:**
- Upon diagnosis

**WHERE:**
- Healthcare setting
- Community–based setting with linkage to medical home

**DOSAGE:**
- Longitudinal (3-12 months long)
- At least 26 contact hours

**FORMAT:**
- Group
- Individual, or
- Both

**CHANNEL:**
- Face-to-face or
- Virtual
KAS 12. Pediatricians and other PHCPs should offer adolescents 12 y and older with obesity (BMI ≥95th percentile) weight loss pharmacotherapy, according to medication indications, risks, and benefits, as an adjunct to health behavior and lifestyle treatment.
Consensus Recommendation: PHCPs may offer children ages 8 through 11 y of age with obesity wt loss pharmacotherapy, according to medication indications, risks, and benefits, as an adjunct to health behavior and lifestyle treatment.
"No current evidence supports weight loss medication use as a monotherapy; thus, pediatricians and other PHCPs who prescribe weight loss medication to children should provide or refer to intensive behavioral interventions for patients and families as an adjunct to medication therapy."

CPG
KAS 13: Pediatricians and other PHCPs should offer referral for adolescents 13 y and older with severe obesity (BMI ≥120% of the 95th percentile for age and sex) for evaluation for metabolic and bariatric surgery to local or regional comprehensive multidisciplinary pediatric metabolic and bariatric surgery centers.
Start treatment immediately and deliver it intensively.

- Sandra Hassink, MD, FAAP
Evaluation & Treatment of Pediatric Obesity

Advocacy Recommendations
Implementation and Advocacy Recommendations: Healthcare

• Coverage of comprehensive obesity prevention, evaluation, and treatment

• Multisector partnership to expand access to evidence-based pediatric obesity treatment programs
Implementation and Advocacy
Recommendations: Healthcare

- **CDS systems** to aid in managing children and adolescents with obesity

- **Improved education and training** opportunities for practicing providers and in preprofessional schools and residency/fellowship programs
Implementation and Advocacy

• accelerate progress in prevention and treatment of obesity through **policy change within and beyond the health care sector** to improve the health and well-being of children

• targeted policies are needed to purposefully address the **structural racism** in our society that drives the alarming and persistent disparities in childhood obesity and obesity-related comorbidities.
Ohio AAP & AAP
Clinical Implementation Resources

CPG
Evaluation & Treatment of Pediatric Obesity
Highlights and Future Directions of Parenting at Mealtime and Playtime (PMP)

Supportive Clinical Spaces and Engagement with Patients Living in Larger Bodies

Motivational Interviewing

Meal Planning on WIC and SNAP

Building Confidence with the Body and Mind

Halal and Kosher Snacks

Creative Forms of Exercise
PMP Mobile App and Contact Information

The PMP team is revising and re-energizing the mobile application in 23/24! Stay tuned for NEW content, technology and design features!!

Program Manager:
Suhavi Salmon-Rekhi
Email: ssalmonrekhi@ohioaap.org
Phone: 614-846-6258
Types of AAP Implementation
Supports Website

- Self-Paced CME Modules
- Quality Improvement Opportunities
- Clinical Decision Support Tools
- Coding Reference Card
- FHIRE Resource
- Multimedia Assets
- Family Resources
AAP Resources & Website

www.aap.org/obesitycpg
Clinical Flow: Assessment and Evaluation

Screen for Overweight/Obesity

- Assess height, weight, and body mass index (BMI).
- Calculate BMI based on age and sex. If BMI is elevated, determine severity.

Obtain Comprehensive Obesity-specific Patient History

- Review of Systems - Relevant Findings
  - Chief Complaint: History of Present Illness (HPI), review of systems.

Assess individual, structural, and contextual risk and protective factors related to healthy behavior and healthy weight. Including: medical history (chief complaint/history of present illness, review of systems, medication history, family history, social determinants of health, individual family structure behavior history, and mental and behavioral health).

Family History

- Obtain a family history for all family members.

Medication History

- Evaluate for obesogenic medications and possible alternatives.

Conduct a Focused Physical Exam and Obtain Labs

- Relevant Physical Exam Findings
  - Measurement of blood pressure, height, weight, and BMI.

Conduct a Flexible Endoscopic Examination

- Flexible fiberoptic endoscopy to evaluate the presence of reflux, esophagitis, or other gastrointestinal conditions.

Talking Points: Engaging Family in Diagnosis & Treatment

- There is nothing more important to the health of your child than you. I would be willing to consult with you to help guide your care and improve your health.

Communicate Diagnosis to Patient

- Ask permission to discuss BMI weight.
- Provide feedback on the child’s health and ways to improve.

Revised BMI: Overweight (overweight & obesity)

- Conduct obesity-specific evaluation.

Bariatric Surgery

- Consider options for patients with severe obesity.

Clinical Flow: Assessment and Evaluation

Screening, Diagnosis, and Evaluation (How – Part 1)
Clinical Flow: Treatment and Approach in Primary Care Office

Treatment (How – Part 2)

- Suggested treatment approaches
- Strategies to intensify treatment
- Pediatrician's toolbox of treatment options
- Medication considerations
- Support on interpreting lab results
Coding Quick Reference Card: maps billing codes to the CPG algorithm for easier integration
Quality Improvement:

- Series of resources for self-paced projects (key driver diagram, change package, measures)
- 2 AAP-sponsored collaboratives to focus on 1) assessment & evaluation and 2) treatment
Patient & Family Resources:

- Updated content for HealthyChildren.org and fact sheet formats
- Goal sheets
Self-paced CME Modules:
Assessment & Evaluation
Treatment

★Now Integrated with PediaLink!
Thank You for Participating!
Any Questions?

Email: bolling.cf@gmail.com and obesity@aap.org

Website: https://ihcw.aap.org
www.aap.org/obesitycpg

Twitter: @AAPHealthyWT
Reference

Take it away, Dr. Logan!
Miranda

She has recently had an ankle injury that has kept her out of practice for the past 3 weeks; she continues to have pain with almost all walking and is not able to run or jump, due to pain and a feeling of instability in her ankle.
Important Elements of the History

- What activity or injury caused the pain?
  - Establish mechanism of injury (or lack of)
  - What makes pain worse now?
- Pain location
- Characterize pain
- Was there/is there swelling?
- Ability to bear weight after injury
- Mechanical symptoms (catching, locking)
- Sense of instability (giving way)
- Prior history of injury same ankle and prior treatment
- Continues to limp after 3 weeks
  - Trying to play on and off in over-the-counter ankle brace
  - + effusion, no bruising
  - TTP over deltoid ligament, ATFL, distal lower leg
  - Routine ankle sprain?
The ‘High Ankle Sprain’

- Distal syndesmotic injury
- Involves ligaments that stabilize tibia and fibula together
High Ankle Sprain

- High force eversion or forced dorsi/plantar flexion
- X-rays to assess ankle stability/fracture
- Early referral
- Immobilize in boot/assess ability to weight bear and if not, put in boot/use crutches
High Ankle Sprain

-Special tests
  -Tib-fib squeeze

-External rotation/Kleiger’s test
High Ankle Sprain

- Treatment
  - Boot with/without weight bearing depending on symptoms
  - Physical therapy
  - 2-3 months to recover
Lateral Ankle Sprain

- 20% of all sports injuries in US
- 73% of athletes have subsequent sprains (Sawkins, MSSE 2007)
  - Loose joint, loose ligaments, weak muscles, poor proprioception
  - Rehab needed to reduce recurrence (Mohammedi, AJSM 2007)
  - Start as soon as able
Lateral Ankle Sprain Rehab/Prevention

Facing anchor, tubing around. Pull foot, pull toward feet. Repeat ___ times per set. Do ___ sets per session. Do ___ sessions per day.

Anchor behind, tubing around. Fast, press down. Repeat ___ times per set. Do ___ sets per session. Do ___ sessions per day.

Cross legs with right leg underneath, foot in tubing loop. Hold tubing around other foot to resist and turn foot in. Repeat ___ times per set. Do ___ sets per session. Do ___ sessions per day.

With right foot in tubing loop, hold tubing around other foot to resist and turn foot out. Repeat ___ times per set. Do ___ sets per session. Do ___ sessions per day.
Obesity and Exercise—Be Aware

- Obese athletes are at higher risk for heat illness:
  - Generate more heat for same level of activity
  - Dissipate heat less efficiently
- Obese athletes are at higher risk for injury — all cause
Changes You May Wish to Make in Practice

- Rehab ankle sprains, even with a simple home exercise program
- Return athlete to play in an ankle brace (for rest of season, at least)
- High degree of suspicion for high ankle sprain
  - Early referral and non-weight bearing
All yours, Dr. Dritz!
Dr. Dritz CME Disclosure:
Medical Consultant for Organon
Miranda

• menarche at 12yo
• q month menses that last 5-6 days
• “terrible cramps” that start 1-2 days prior to period and extend 2-3 days into menses
• Sometimes misses rugby practice and school because of cramps despite using Ibuprofen
• Also struggling more with acne on her face, back & chest
Thinking Outside the “Birth Control” Box

Contraceptives for Non-Contraceptive Issues
Contraceptive Medication Options

Combined estrogen + progestin methods (CHCs) = pill, patch, ring

Progestin only methods = POP, DMPA, implant, LNG-IUDs

Non-hormonal method = Cu-IUD

Emergency contraception

EC = OTC single-dose progestin (Plan B®, Mychoice®) ulipristal acetate (Ella®)
Of adolescents 15-19 use combined contraceptives solely for non-contraceptive reasons

Menstrual issues & regulation

Acne

Bleeding Disorders

Protection when on Teratogenic medications

Many other reasons...

Jones, RK, Beyond Birth Control: The Overlooked Benefits of Oral Contraceptive Pills, Guttmacher Institute, 2011
Benefits of Having Multiple Uses

• With potentially confidential adolescent care, it is helpful to have additional medical indications that can be highlighted for families

• Most non-contraceptive uses are off-label, but commonly used clinically based on extensive medical literature including Cochrane reviews
Non-Contraception Benefits of Contraceptives

- **Acne:** CHCs
- **Benign Breast Disease:** CHCs
- **Cancer protection:** CHCs protect against ovarian and endometrial cancer
- **Cycle Control:** CHCs, POPs, LNG-IUD, DMPA,
- **Dysmenorrhea:** CHCs, POP, implant, LNG-IUD
- **Ectopic Pregnancy:** CHCs ideally *(to prevent future risks)*
- **Endometriosis:** CHCs, DMPA, implant, LNG-IUD
- **Epilepsy:** DMPA *(to prevent catamenial seizures)*
- **Iron Deficiency Anemia:** CHCs, POP, DMPA, implant, LNG-IUD
- **Menstrual suppression:** Continuous CHCs, POP, DMPA, implant, LNG-IUD
- **Ovarian Cysts prevention:** CHCs ideally *(to prevent future risks)*
- **PCOS:** CHCs ideally
- **Menstrual Hygiene Assistance for patients with Physical and/or Developmental challenges:** menstrual regulation with many
- **PID:** CHCs, DMPA
- **Premenstrual or menstrual-related symptoms:** extended or continuous use of CHCs, or any menstrual suppression
- **Sickle Cell Disease:** DMPA *(to prevent pain crisis)*
- **Pregnancy prevention when on Teratogenic Medications:** various options depending on medication
- **Von Willebrand Disease & other bleeding disorders:** CHCs, LNG-IUD, DMPA, implant
- **Gender Dysphoria (menstrual suppression):** DMPA, POPs, implant, IUD, CHCs

---

Noncontrceptive Use of Contraceptive Agents, Peds in Review, 35(6), June 2014
Dysmenorrhea = pain with menses

<table>
<thead>
<tr>
<th></th>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Possible causes</strong></td>
<td>Normal prostaglandin production</td>
<td>Endometriosis, obstruction of outflow tract, PID, adhesions, ovarian cyst, ectopic pregnancy, miscarriage</td>
</tr>
<tr>
<td><strong>Onset</strong></td>
<td>Gradual</td>
<td>Rapid or subacute</td>
</tr>
<tr>
<td><strong>Bleeding</strong></td>
<td>Regular</td>
<td>Often irregular</td>
</tr>
<tr>
<td><strong>Duration of pain</strong></td>
<td>1-3+ days</td>
<td>Prolonged, intermenstrual, worse with menses</td>
</tr>
<tr>
<td><strong>Associated history</strong></td>
<td>Nausea, vomiting, diarrhea, headache</td>
<td>Abdominal pain, dyspareunia, prior STD</td>
</tr>
<tr>
<td><strong>Treatment</strong></td>
<td>NSAID, hormonal contraceptive</td>
<td>Management of underlying pathology</td>
</tr>
</tbody>
</table>
Dysmenorrhea Treatment

• 1° Dysmenorrhea:
  • Prostaglandin Inhibitors (NSAIDs):
    • SCHEDULED Ibuprofen 400-600mg initial dose and then 400-600mg PO q4-6 hours during menses
    • SCHEDULED Naproxen sodium (Aleve) 550 mg initial dose, then 275mg q 6-8 hrs during menses
    • Give at first sign of cramps and then scheduled during typical days of dysmenorrhea symptoms (typically 2-5 days max)

• Hormonal Contraceptives:
  • Oral combined pill (OCP) at 30-35mcg estrogen content is recommended (estrogen dose optimizes bone health)
  • Any form that inhibits endometrial growth, ovulation and prostaglandin synthesis can be effective (medroxyprogesterone shot, the CHC patch, the CHC ring, LNG-IUD, etc)
  • May take 2-3 months for full benefit but effective in >90% of cases

• Additional Therapies:
  • Limited evidence available, but some effectiveness
  • Locally applied heat, supplements (Mg, Ca, Vit B6), Herbals (rose tea), acupuncture, optimal exercise and nutrition
  • Menstrual calendar may be helpful to track symptoms both for evaluation and response to treatment
Thinking Inside the “Birth Control” Box

Pregnancy Prevention
And pregnancy prevention still matters too…
Rethinking Progestin-Only Pills (POPs)
Slynd® and OPill®
Slynd® = Rx progestin-only pill (POP)

• Approved in 2019

• Progestin-only pill (4mg drospirenone – the same progestin in Yaz®)

• Compared to previous progestins = More “forgiving” because much longer half-life (25-30 hr)
  • CONSISTENTLY BLOCKS OVULATION PLUS
  • UP TO A 24-HOUR “MISSED PILL” WINDOW

• Designed with a 4 days of placebo pills = monthly withdraw bleed

• Contraception effectiveness:
  • 98-99% “perfect use” rate
  • 93% “typical use” rate (similar to CHC)

• Common side effects: acne (<4%), irregular bleeding (<3%), headache (<3%), breast tenderness (2%), nausea (<2%), weight increase (<2%)

OPill® = The 1st OTC birth control in the US

- Approved in July 2023; expected to be available in 2024
- Progestin-only pill (0.075mg norgestrel)
- Contraception effectiveness:
  - 98% “perfect use” rate
  - 93% “typical use” rate (similar to CHC)
- Common side effects: changes in menstrual bleeding (spotting, frequent bleeding, less frequent, amenorrhea), nausea, headache, increased appetite, cramps/bloating

Joint meeting of the nonprescription drug advisory committee and the obstetrician, reproductive, and urological drugs advisory committee, May 2023. Briefing material, https://www.fda.gov/media/167893/download
When Evaluating Contraceptive Options...

Important Medical Considerations
# Medical Contraindications

US Medical Eligibility Criteria for Contraceptive Use adapted from the WHO

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A condition for which there is no restriction for the use of the contraceptive method</td>
</tr>
<tr>
<td>2</td>
<td>A condition for which there is no restriction for the use of the contraceptive method</td>
</tr>
<tr>
<td>3</td>
<td>A condition for which the theoretical or proven risks usually outweigh the advantages of using the method</td>
</tr>
<tr>
<td>4</td>
<td>A condition for which the theoretical or proven risks usually outweigh the advantages of using the method</td>
</tr>
</tbody>
</table>
Using the U.S. MEC & SPR App for Medical Contraindications

Common Adolescent Estrogen Contraindications

- Common category 3 or 4 conditions for estrogen contraindication in adolescents:
  
  **History of thrombosis or hypercoagulable condition:**
  - Factor V Leiden, Protein C/S Deficiency, Antithrombin Deficiency, etc
  - If family history – recommend testing to determine if patient has same condition

  **Migraines with aura**

  **Hypertension**
  (SBP ≥160; DBP ≥100)
  (medroxyprogesterone=Category 3)

- Are there medication interactions we need to worry about?

  **Antibiotics** -- NO INTERACTION
  - Only exception = rifampin

  **Antifungals** – NO INTERACTIONS
  - Only exception = griseofulvin or fluconazole

  **Antivirals** – NO INTERACTIONS
  - Only exception = some HIV antivirals

  **SSRIs** – NO INTERACTIONS
  - Only related exception = St John’s Wort

  **Many anticonvulsants** –
  Category 3
  - Can increase estrogen-level side effects or vice versa
  - OK for progestin-only options
Using the U.S. MEC & SPR App for “Quick Starting” a Method

Get The App: [Link to CDC app]


To “Quick Start” on day of visit:

BOX 2. How to be reasonably certain that a woman is not pregnant

A health care provider can be reasonably certain that a woman is not pregnant if she has no symptoms or signs of pregnancy and meets any one of the following criteria:
- is ≤7 days after the start of normal menses
- has not had sexual intercourse since the start of last normal menses.
- has been correctly and consistently using a reliable method of contraception
- is ≤7 days after spontaneous or induced abortion
- is within 4 weeks postpartum
- is fully or nearly fully breastfeeding (exclusively breastfeeding or the vast majority [≥85%] of feeds are breastfeeding), amenorrheic, and <6 months postpartum

Add negative hCG and the negative predictive value is > 99%
Ohio AAP website
Resource Center:

BC Counseling
Teen Resource


YOUR BODY. YOUR BIRTH CONTROL.
Bring it on home, Dr. Casares!
Dr. Casares CME Disclosure:
Pediatric Medical Advisor for CeraVe
Pediatric Medical Advisor for Gerber
Miranda

• Struggling more with acne now on her face, back & chest
• Has tried a number of products, but acne continues to worsen and skin now dry and flaky
• Mom requests dermatology referral but they are months out
• Significant mental health impact from current appearance
Acne is a Multi-Factoral Disease Process
The Psychological Impact of Acne

- Associated with lower self-esteem, anxiety, depression\textsuperscript{1–4}
- May produce negative emotions: embarrassment, humiliation, self-consciousness\textsuperscript{1–3}
- Socioeconomic impact, perceptions of others (e.g., increased unemployment rates in those with severe acne)\textsuperscript{1,2}
- Can lead to acne scars, which can further affect quality of life\textsuperscript{1}

# Acne Stages

## Acne Categorization by Degree of Severity

<table>
<thead>
<tr>
<th>Class</th>
<th>Type</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Comedonal acne</td>
<td>Comedones result from complete or partial ductal occlusion and sebum accretion leading clinically to small white or grey white papules.</td>
</tr>
<tr>
<td>2</td>
<td>Mild-to-moderate papulopustular acne</td>
<td>Both comedones and inflammatory lesions are present. Superficial inflammatory lesions include papules and pustules 5 mm or less in diameter.</td>
</tr>
<tr>
<td>3</td>
<td>Severe</td>
<td>Inflammatory lesions comprised of larger or more extensive papules, pustules and/or presence of nodules. Nodules have depth and are &gt; 5 mm diameter.</td>
</tr>
</tbody>
</table>

Corrugated acne has more extensive inflammatory lesions including suppurative nodules, which may coalesce into sinus tracts. Extensive and disfiguring scarring may ensue.
The AAD Acne Treatment Guidelines
## Differentiating Acne Options

<table>
<thead>
<tr>
<th></th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Line Treatment</strong></td>
<td>Benzoyl Peroxide (BP) or Topical Retinoid -or- Topical Combination Therapy** BP + Antibiotic or Retinoid + BP or Retinoid + BP + Antibiotic</td>
<td>Topical Combination Therapy** BP + Antibiotic or Retinoid + BP or Retinoid + BP + Antibiotic -or- Oral Antibiotic + Topical Retinoid + BP -or- Oral Antibiotic + Topical Retinoid + BP + Topical Antibiotic</td>
<td>Oral Antibiotic + Topical Combination Therapy** BP + Antibiotic or Retinoid + BP or Retinoid + BP + Antibiotic -or- Oral Isotretinoin</td>
</tr>
<tr>
<td><strong>Alternative Treatment</strong></td>
<td>Add Topical Retinoid or BP (if not on already) -or- Consider Alternate Retinoid -or- Consider Topical Dapsone</td>
<td>Consider Alternate Combination Therapy -or- Consider Change in Oral Antibiotic -or- Add Combined Oral Contraceptive or Oral Spironolactone (Females) -or- Consider Oral Isotretinoin</td>
<td>Consider Change in Oral Antibiotic -or- Add Combined Oral Contraceptive or Oral Spironolactone (Females) -or- Consider Oral Isotretinoin</td>
</tr>
</tbody>
</table>

---

[https://doi.org/10.1016/j.jaad.2015.12.037](https://doi.org/10.1016/j.jaad.2015.12.037)
What Can We Really Do as PCPs? A LOT

Skincare:
A Necessary Part of Acne Treatment & Management

The skincare regimen should be an essential part of the acne prevention, treatment, and maintenance care regimen.¹⁻³

A consensus paper stated that dryness and skin irritation resulting from acne treatment could be improved using ceramide-containing cleansers and moisturizers, enhancing treatment adherence.¹

Skincare is a necessary part of acne treatment and is part of various acne guidelines.

The type of acne and individual patient characteristics can help determine the appropriate skincare when used in conjunction with topical or systemic acne therapies.¹⁻³
What Can We Really Do as PCPs? A LOT

Studies in older age groups have shown that acne-affected skin may be prone to irritation, frequently resulting from acne treatment. Systemic and topical medications, such as retinoids, antibiotics, and benzoyl peroxide, are associated with skin barrier alteration, causing irritation and dry skin conditions.

These unwanted effects can reduce adherence to treatment and lower therapeutic outcomes. Non-comedogenic cleansers and moisturizers have been successfully used to reduce skin irritation, however, studies on acne and skin irritation in the pediatric population are limited.
What Can We Really Do as PCPs? A LOT

Tips to manage acne breakouts

- Wash the face no more than twice a day with warm water and a mild cleanser. Gently massage the face with circular motions. Don’t scrub.

- After cleansing, apply treatment and a moisturizer as recommended.

- Don’t pop pimples because it increases inflammation and infection, enhancing swelling, redness, and may lead to scarring.

- Avoid touching the face or leaning your face on objects that collect sebum and skin residue like a cell phone. As touching can spread the infection, wash the hands before applying treatment, skincare or makeup.

- If wearing glasses or sunglasses, clean them frequently to keep oil from clogging pores around the eyes and nose.

- If acne is present on the body, do not wear tight clothes. Allow the skin to breathe and prevent irritation. Avoid wearing scarves, headbands, and caps as they can collect dirt and oil.

- Remove makeup before going to sleep. Choose non-comedogenic brands. Do not use old makeup.

- Keep hair clean and out of the face to prevent acne flares.

- Use sun protection (sun avoidance and sunscreen with an SPF ≥15) as sun exposure may trigger acne flares. Moreover some treatments may cause photosensitivity.

What Can We Really Do as PCPs? A LOT

Best ways to achieve treatment success

• Stress the potential downside of the treatment.
• Stress a minimum of 6 weeks before improvement of the condition. Do not have patients return to the clinic for at least 6-12
Questions?