Choosing Wisely in Women's Health

Brigid M Dolan, MD, MEd

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Learning Objectives

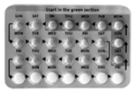
1. Compare and contrast contraceptive options for women of childbearing age, including efficacy, cost, and contraindications based on comorbid conditions
2. Identify appropriate first-line therapy for uncomplicated UTI.
3. Identify women at risk of fracture before age 65 who benefit from DEXA screening
4. Develop an approach to discussing recent literature pertaining to ovarian cancer screening with patients

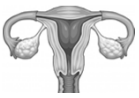
What is "Choosing Wisely"?

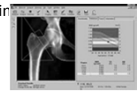
- ABIM initiative started in 2012
- Asks specialty societies to make recommendations to help clinicians make cost-effective and appropriate decisions in the care of patients
- >70 specialty societies—including AAFP, ACP, SGIM—have contributed.
- Can access the full list at www.choosingwisely.org

Women's Health

- We will review 4 recommendations from the group related to:
  - Contraception management
  - Treatment of UTI
  - DEXA screening
  - Ovarian Cancer Screenin







Case 1:

You log into your electronic health record and find the following note:

Ms. Katie Janssen, DOB 8/15/1990, has called requesting a refill of her combined oral contraceptive pill (COCs). Her last visit was 6/21/2016. Last pap was 6/21/2014.

You decide to:

a. Refill her prescription

b. Advise that she needs to have a pap before reneweing

c. Review additional patient data

Choosing Wisely Recommendation (AAFP):

Don't require a pelvic exam or other physical exam prior to prescribing oral contraceptive medications

Pelvic exams and COCs

- Despite guidelines advising to the contrary, a 2010 study noted that **nearly 1/3** of OB/GYNs and family medicine physicians reported requiring annual pelvic examination prior to refilling combined oral contraception
- Prior studies demonstrated **improved access when there was not a requirement** for pelvic examination
- The **USPSTF does not currently recommend annual pelvic** examinations as part of a well-woman exam due to lack of evidence of benefit.

Henderson JT et al. Obstet Gynecol. 2010 Dec; 116(6): 1257-1264
Stewart FH et al. JAMA 2001 May 2; 285(17):2232-9
Guirguis-Blake, JM et al. AHRQ Publication No. 15-05220-EF-1. June 2016. Accessed 8.23.2016: file:///H:/pelvicexam-draftes147.pdf

Case 1 cont.

You are not bothered by the date of her last up-to-date pap. However, you notice that her last 3 blood pressures in your office have all been elevated: 145/92, 148/90, and 142/88.

You decide to:

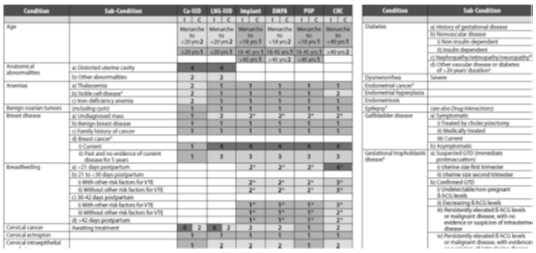
a. Renew her medication and attribute to white coat hypertension

b. Ask patient to schedule a follow up visit to review her use of COCs.

DO use the Centers for Disease Control Summary Chart of US Medical Eligibility Criteria for Contraceptive Use (US MEC)

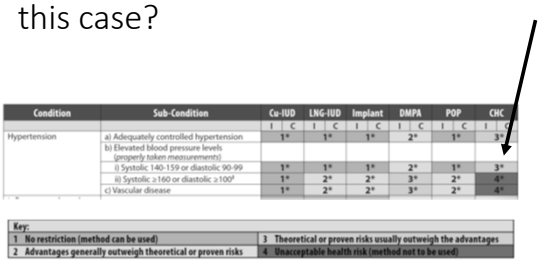
Curtis, KM et al. MMWR July 29, 2016, 65(3);1-104

Summary Chart of U.S. Medical Eligibility Criteria for Contraceptive Use



Curtis, KM et al. MMWR July 29, 2016, 65(3);1-104

How does the US MEC help us in this case?



Condition	Sub-Condition	Cu-IUD		LNG-IUD		Implant		DMPA		POP		CHC	
		I	C	I	C	I	C	I	C	I	C	I	C
Hypertension	a) Adequately controlled hypertension	1*		1*		1*		2*		1*		3*	
	b) Elevated blood pressure levels (*properly taken measurements*)												
	i) Systolic 140-159 or diastolic 90-99	1*		1*		1*		2*		1*		3*	
	ii) Systolic ≥ 160 or diastolic ≥100[2]	1*		2*		2*		3*		2*		4*	
	c) Vascular disease	1*		2*		2*		3*		2*		4*	

Key:	
1 No restriction (method can be used)	3 Theoretical or proven risks usually outweigh the advantages
2 Advantages generally outweigh theoretical or proven risks	4 Unacceptable health risk (method not to be used)

Case 1 cont.

You both agree that combined oral contraception is no longer a good option for her. You counsel her to consider:

a. Levonorgestrel IUC

b. Progesterone-only pills

c. Condoms

DO consider the use of long-acting reversible contraception, like IUDs or implants, as first-line contraception—particularly for patients with contraindications to estrogen therapy.

Comparing Effectiveness and Costs

Type of contraceptive	"Typical Use" First-year Failure Rate	"Perfect Use" First-year Failure Rate	5-year Cost
Etonorgestrel Implant (Nexplanon)	0.05%	0.05%	$2178
Vasectomy	0.15%	0.10%	$713
Levonorgestrel IUC (Mirena)	0.2%	0.2%	$930
Copper IUD (Paragard)	0.8%	0.6%	$647
Progesterone Shot	3%	0.3%	$2681
Oral Contraceptive Pills/Patch/Ring	8%	0.3%	$3158-3458
Male condom	15%	2%	$1575
Tubal ligation	0.5%	0.5%	$2978

Trussell, J. Contraception January 2009; 79(1); 5-14
Curtis, KM et al. MMWR July 29, 2016, 65(3);1-104

Case 1 summary points:

- Don't require a pelvic exam or other physical exam prior to prescribing oral contraceptive medications **Choosing Wisely Recommendation (AAFP)
- Do use the Centers for Disease Control Summary Chart of US Medical Eligibility Criteria for Contraceptive Use (US MEC) to help guide your conversation with patients regarding contraception selection.
- Do consider the use of long-acting reversible contraception, like IUDs or implants, as first-line contraception—particularly for patients with contraindications to estrogen therapy.

Case 2:

Ms. Irma Jacks is a 34 year-old woman with no significant past medical history who calls your office complaining of dysuria, urinary frequency, and urgency for the past 1 day. She is sexually active in a monogamous relationship. This is similar to UTIs that she has had in the past. She requests that you call a prescription into her local pharmacy to treat her UTI. You decide to:

a. Have her come into the office for a urinalysis and culture.

b. Call in a prescription for Ciprofloxacin x 3 days

c. Call in a prescription for Nitrofurantoin x 5-7 days

Choosing Wisely Recommendation (American Urogynecologic Society):
DON'T use fluoroquinolones as first line therapy in the treatment of uncomplicated UTI.

IDSA Guidelines: No more Cipro for UTI

- The specific recommendation:

" The fluoroquinolones (FQ)—ofloxacin, ciprofloxacin, and levofloxacin—are highly efficacious in 3-day regimens but have a propensity for collateral damage and should be reserved for important uses other than acute cystitis and thus should be considered *alternative antimicrobials* for acute cystitis."

Collateral damage= increasing FQ resistance in gram-negative bacilli like pseudomonas.

Gupta, K et al. CID March 1, 2011:52 pe103

DO use Nitrofurantoin, Fosfomycin, or Trimethoprim-Sulfamethoxazole as first-line agents.

First Line Options for Uncomplicated UTI

Drug	Dosage	Estimated Efficacy-Clinical	AHA Level of Evidence*	Cost** Zip code=60611
Trimethorprim-Sulfamethoxazole	160/800 mg twice daily for 3 days	91% (86-100)	A-I	$4 Walmart $10 Walgreens
Nitrofurantoin	100mg twice daily for 5-7 days	92 (87-95)	A-I (for 7 day course)	$17 Walmart $24 Walgreens
Fosfomycin trometamol	3g single dose	91 (83-95)	A-I	$74 Walmart $78 Walgreens
~~Fluoroquinolones~~	~~Varies, 3-7 days~~	~~89 (81-93)~~	~~B-III~~	~~$4 Walmart~~
s				$5 Walgreens
~~B-lactams~~	~~Varies, 5-6~~	~~86 (79-90)~~	~~A-III~~	~~$48 Walmart~~ $70 Walgreens

*A-I: Evidence that tx is useful, effective; data from mult RCTs
A-III: Evidence that tx is not useful/effective or may be harmful; data from mult RCTs
B-III: Evidence that treatment is not useful/effective or may be harmful;
data from single RCT or non-randomized trials

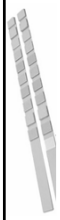
**Cost data from www.goodrx.com as of 8/24/2016

Grigoryan, L et al. JAMA 2014; 312(16)1677-1684.

"Can you please ask the MD to call in an RX?"

YES!

- 2/3 classic symptoms (dysuria, frequency, urgency) + absence of vaginal discharge**= 90% PPV** for UTI (as good as a UA in office)
  -Exclusions: relapse/recurrent infection, complicated infection, high likelihood of drug resistant organisms
- Increased **cost effectiveness and patient preference** (85% in one study) for phone management as long as the following symptoms are absent:
  -Flank/abdominal pain, fever, inability to urinate, inability to take oral pills, pregnancy, on immunosuppression, vaginal symptoms, recent UTI or urologic procedure in the past 4-6 weeks.



Grigoryan, L et al. JAMA 2014; 312(16)1677-1684.

Case 2 summary points:

- **DON'T** use fluoroquinolones as first line therapy in the treatment of uncomplicated UTI. **Choosing Wisely Recommendation
- DO use Nitrofurantoin, Trimethoprim-Sulfamethoxazole, or Fosfomycin as first line agents.
- DO consider calling in a prescription for uncomplicated UTI in appropriate patients.

Case 3

Mrs. Martha Cheers is a healthy 57 year-old woman coming in for her annual PE. She takes Hydrochlorothiazide 25mg for HTN, but no other medications. She drinks 1-2 glasses of wine on holidays, has never smoked, and her parents are both healthy in their 80s. Her BMI is 26. She went through menopause at age 52 and asks if she should have a bone density test. You answer:

a. No, we will order one when you turn 60
b. No, you'll be due at age 65
c. Yes, we'll order one today

Choosing Wisely Recommendation (AAFP):

Don't use dual-energy x-ray absorptiometry (DEXA) screening for osteoporosis in women younger than 65 with no additional risk factors

Case 3a…

Mrs. Cheers' cousin, Mary Grant, is worried about her bone density. Her mother had a hip fracture at age 65. Mary is now 61. She has smoked 1 ppd for the last 30 years, though she's trying to quit. She doesn't drink alcohol and is not currently treated for any illnesses. Her BMI is 20. She asks if she should have a bone density test because she does not want to end up like her mother. You answer:

a. No, you'll be due at age 65

b. Yes, we'll order one today

DO screen women under 65 when the risk of fracture is equal to or greater than an average risk 65 year-old.

Nelson HD et al. USPSTF Recommendation. AHRQ Publication No. 10-05145-EF-1, July 2010.

Assessing risk of fracture

	Risk Factor	Relative Risk of Fracture (95% CI)
	Prior fracture after age 50y	1.62 (1.30-2.01)
	Body-mass index (20 vs 25)	1.42 (1.23-1.65)
☆	Previous or current use of corticosteroids	2.25 (1.60-3.15)
	Rheumatoid arthritis	1.73 (0.94-3.20)*
☆	Parental history of hip fracture	2.28 (1.48-3.51)
	Current smoking	1.60 (1.27-2.02)
	Alcohol intake >2 drinks/day	1.7 (1.2-2.42)

Khosla, S et al. NEJM 2007; 356 (22):2293-3000

Use FRAX if you are not sure…

https://www.shef.ac.uk/FRAX/tool.aspx?country=9

Case 3 cont…

Mrs. Cheers asks you if she should take a calcium supplement. She heard this prevents bone loss. You tell her:

a. No

b. Meh- either way. It can't hurt

c. Yes, take Calcium Carbonate 500mg daily

d. Yes, take Calcium Carbonate 500mg daily + Cholecalciferol 1000 IU

Don't routinely recommend calcium supplementation (with or without vitamin D) to women for bone health.

Bolland et al. BMJ 2015; 351: h4580
Tai et al. BMJ 2015; 351: h4183

No more calcium supplementation?

- Two large meta-analyses published in BMJ in fall of 2015:
  1) Calcium and **bone density**: calcium supplementation & high calcium diets produced insignificant increases in bone density, likely not clinically significant. Femoral neck increases in BMD were not statistically significant.
  2) Calcium and **fracture risk**: calcium supplementation & high calcium diets did not improve risk of fracture. Hip fracture relative risk 0.95 with CI 0.76-1.18.
- Prior studies raised question of small but significant risk of increased CAD in women taking calcium supplements from the WHI data
  - 143 women had MI in calcium group, 111 in placebo (HR 1.31, CI 1.02-1.76)

Bolland et al. BMJ 2015; 351: h4580
Tai et al. BMJ 2015; 351: h4183
Bolland et al. BMJ 2010; 341: c3691

Case 3 summary points:

- Don't use dual-energy x-ray absorptiometry (DEXA) screening for osteoporosis in women younger than 65 with no additional risk factors **Choosing Wisely Recommendation
- Do screen women under 65 when the risk of fracture is equal to or greater than an average risk 65 year-old.
- Don't routinely recommend calcium supplementation (with or without vitamin D) to women for bone health.

Case 4:

Mrs. Sally Frieden comes into your office for her annual physical. Her friend was recently diagnosed with stage IIIC ovarian cancer and told her she must talk with her physician about ovarian cancer screening. She saw an article in the NY Times that said that there was a blood test that could detect cancer early and asks you to order it. You decide to:

a. Counsel Mrs. Frieden that there is no effective screening tool for ovarian cancer
b. Order a CA-125 and pelvic ultrasound
c. Order a CA-125 and google a complicated mathematical algorithm to help interpret the results.

Choosing Wisely Recommendation (ACOG):

Don't use pelvic ultrasound (or pelvic ultrasound plus biomarkers) to screen for ovarian cancer.

This isn't new… why are we talking about it?


SECTIONS SEARCH

The New York Times

RESEARCH

Early Detection of Ovarian Cancer May Become Possible

By DENISE GRADY DEC. 17, 2015

Grady, D. New York Times. December 17, 2015

Lancet study: CA-125 + proprietary algorithm

- Large RCT of ovarian cancer screening: 202,638 participants
- Three groups:
  1) CA-125 + **proprietary** mathematical algorithm "ROCA" (50,640)
  2) Ultrasound screening (50,639)
  3) No screening (101,359)
- 1282 women were diagnosed (0.6%)
- No mortality benefit to screening
- Nearly significant increase in mortality after 7-14 years of follow-up
- Authors propose that with longer follow-up, there could be a mortality benefit.

Jacobs, IJ et al. Lancet March 2016 387(10022) p945-56

Case 4 summary point

Despite the (positive) reporting around (negative) trial this year…

- Don't use pelvic ultrasound (or pelvic ultrasound plus biomarkers) to screen for ovarian cancer. **Choosing Wisely Recommendation

Review of Choosing Wisely Recommendations

- Don't require a pelvic exam or other physical exam prior to prescribing oral contraceptive medications
- Don't use fluoroquinolones as first line therapy in the treatment of uncomplicated UTI.
- Don't use dual-energy x-ray absorptiometry (DEXA) screening for osteoporosis in women younger than 65 with no additional risk factors
- Don't use pelvic ultrasound (or pelvic ultrasound plus biomarkers) to screen for ovarian cancer.

To end on a positive note…

- Do use the Centers for Disease Control Summary Chart of US Medical Eligibility Criteria for Contraceptive Use (US MEC)
- Do consider IUDs or implants as first-line contraception—particularly for patients with contraindications to estrogen therapy.
- Do use Nitrofurantoin, Fosfomycin, or Trimethoprim-Sulfamethoxazole as first-line agents.
- Do employ phone management for uncomplicated UTIs.
- Do screen women under 65 when the risk of fracture is equal to or greater than an average risk 65 year-old.