UPDATES IN GENERAL INTERNAL MEDICINE PRACTICE

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DISCLOSURES?

I HAVE NO DISCLOSURES AT THIS TIME TO DECLARE.

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OBJECTIVES

- **REVIEW PRACTICE CHANGING GUIDELINES PUBLISHED IN 2018**

  -HPV TESTING

  -ZOLEDRONATE IN OSTEOPENIA

  -SGLT-2 INHIBITORS/GLP-1 AGONISTS AND MORTALITY

OBJECTIVES, CONT.

-AMBULATORY BP MONITORING

-Xa ANTAGONIST VS LMWH

-VAGINAL ESTRADIOL

WINGO, MT ET AL., 2019 AUG; AM J MED, 132(8), 926-930

HIGH RISK HPV TESTING

USE OF HIGH RISK HPV TESTING WITH PAP SMEAR

2012 USPSTF:

21-29 YO CYTO ALONE Q 3 YRS

30-65 YO CYTO ALONE Q 3 YRS

OR

30-65 YO CO-TESTING Q 5 YRS

STUDY:

- 4RCT >250K WOMEN: CIN3+ HIGHER FOR hR HPV ALONE C/T CYTO ALONE
- CYTO SENS < hR HPV FOR CIN 2-3
- hR HPV OR COTEST→ MORE COLPO
- COTEST: HIGHEST FALSE + RATE
- ALL 3 OPTIONS > NO SCREENING 30-65 YO

CURRY, SJ ET AL,, *JAMA.* 2018 AUG ;320(7):674-686

LIMITATIONS OF STUDY

1. TRIALS WERE NOT IN THE THE U.S. (AUS, FINLAND, CANADA, ITALY)
2. HEALTH ACCESS/SYSTEMS VARY FOR F/U STRATEGY
3. NO HEAD TO HEAD TRIALS OF COTESTING VS hR HPV TESTING ALONE

IMPLICATIONS FOR PRACTICE

- CYTO Q 3 YRS OR hR HPV ALONE Q 5 YEARS FOR 30-65 YO
- CO-TESTING Q 5 YRS IS FINE-->MORE TESTS/PROCEDURES?
- 21-29 YO: CYTO ALONE

WHILE WE'RE ON THE SUBJECT...

REMEMBER TO VACCINATE FOR HPV!

PER CDC: ROUTINE VACCINE AT 11-12YO

ACIP: FEMALE 13-26 YO, MALE 13-21 YO

> MALE THRU 26 YO IF GAY, BISEXUAL, MSM, TRANSGENDER, IMMUNOCOMPROMISED

SCHEDULE: 0, 1-2, 6 MOS

NOT REC FOR PREGNANCY

ZOLEDRONATE IN OSTEOPENIA

BISPHOSPHONATES

- EFFICACY OF BISPHOSPHONATES TO LOWER POSTEMENOPAUSAL OSTEOPOROSIS FX

- **BUT** MOST FXS OCCUR IN OSTEOPENIA

ZOLEDRONATE IN WOMEN WITH OSTEOPENIA

STUDY:

- RANDOMIZED, DB/PLAC CONTROLLED
- 2000 >65 YO POSTMENOPAUSAL WOMEN IN NZ
- ZOLEDRONATE 5MG IV OR PLACEBO Q 18 MOS
- VERT & NON-VERT FXS OVER 6 YRS
- DIET CALCIUM RECC + VIT D PROVIDED

RESULTS:

- FRAGILITY FX 122 WITH ZOLEDRONATE, 190 WITH PLACEBO (HR=0.63)
- ZOLEDRONATE DIDN'T SIG DEC RISK OF HIP FX C/T PLACEBO
- NO REPORTED ATYPICAL FEMUR FX OR JAW OSTEONECROSIS CASES

LIMITATIONS OF STUDY

1. PATIENTS WITH OSTEOPENIA OF AT LEAST 1 HIP STUDIED. BUT SO WERE PTS WITH OSTEOPOROSIS OF OTHER HIP OR SPINE

1. WHEN 163 WITH OSTEOPOROSIS EXCLUDED, HR=0.63

IMPLICATIONS FOR PRACTICE

- WOMEN WITH OSTEOPENIA ARE AT INCREASED RISK FOR FRAGILITY FX
- ZOLEDRONATE 5MG IV Q 18 MOS IS EFFECTIVE AT REDUCING VERT FX
- CAN'T GENERALIZE FINDINGS TO OTHER PT POPLNS: MEN, NORMAL BMD, YOUNGER WOMEN

REID, IR ET AL. NEJM 379 (2018); PP. 2407-2416

WHILE WE'RE ON THE SUBJECT…

DID YOU KNOW THAT ACP RECOMMENDS AGAINST DEXA MONITORING DURING 5 YRS OF PHARM RX FOR OSTEOPOROSIS?

QASIM, A ET AL. ANN INT MED. 2017;166(11):818-839.

DM MEDS AND MORTALITY

A QUICK REMINDER/MOA:

- **SGLT2 INHIBITORS (-LIFLOZIN):** INHIBIT SGLT2 IN THE PCT, PREVENT REABSORPTION OF GLUCOSE, INC EXCRETION IN URINE
- **GLP1 AGONISTS (-TIDE):** INC GLUC-DEP INSULIN SECRETION BY PANCREAS, SUPPRESSES GLUCAGON, SLOWS GASTRIC EMPTYING
- **DDP4 INHIBITORS (-GLIPTIN):** SIMILAR MOA AS GLP1 AGONISTS

DM MEDS AND MORTALITY

STUDY:

176, 000+ PATIENTS, 236 TRIALS

RESULTS:

- SGLT-2 INH & GLP-1 AGONISTS→LOWER ALL CAUSE MORTALITY AND CV MORTALITY
- 2018 RCT: EMPAGLIFOZIN REDUCED CV DEATH, HF HOSP, ALL CAUSE MORTALITY C/T PLACEBO IN PTS WITH CVD + CKD

ZHENG, SL ET AL. JAMA 319 (2018), PP. 1580-1591

LIMITATIONS:

- SHORT OVERALL DURATION OF F/U. ? SIG BENEFITS OR SEs WITH TIME
- SAFETY/EFFICACY EVAL'D BY DRUG CLASS-NOT INDIV DRUG
- NEWER MEDS MAY BE COST-PROHIBITIVE

WANNER, C ET AL. CIRCULATION 137 (2018), PP. 119-129

IMPLICATIONS FOR PRACTICE

- ADA RECOMMENDS METFORMIN AND LIFESTYLE MGMT AS 1ST LINE
- IF A1C > TARGET IN PTS WITH ASCVD-->SGLT-2 INHIBITORS OR GLP-1 RECEPTOR AGONISTS RECOMMENDED
- TAKE PT PREFERENCE, COST INTO CONSIDERATION

HOME BLOOD PRESSURE MONITORING

HOME BP MONITORING

STUDY:

- 12 MONTH UNMASKED. 1182 PTS (SBP>145MM HG, AGE<35 YO, </= 3 BP MEDS)
- RANDOMIZED 1:1:1 BP SELF MONITORING W/ OR W/O TELEMEDICINE OR USUAL CARE
- BPs REVIEWED MONTHLY, PROVIDER ADJUSTMENTS
- 1ry OUTCOME: SBP
- 2dry OUTCOME: BP @ 6 MOS, DBP, ADVERSE EVENTS, MED ADHERENCE, WT, QOL, LIFESTYLE FACTORS

RESULTS:

- POST 12 MOS, SBP LOWER IN BOTH TELEMONITORING (136) AND SELF-MONITORING C/T CLINIC (140.4)
- PTS MORE LIKELY TO BE ON ADDNL MEDS IN TELEMONITORING (1.70) & SELF-MONITORING (1.63) VS USUAL CARE (1.55)

MCMANUS, RJ ET AL. LANCET, 291 (2018), PP. 949-959

LIMITATIONS OF STUDY

1. NOT POWERED TO ASSESS CV OUTCOMES
2. SINGLE COUNTRY, PREDOMINANTLY WHITE POPULATION

IMPLICATIONS FOR PRACTICE

- UTILIZING HOME BP MONITORING W/ OR W/O TELEMONITORING IMPROVES SBP AT 12 MOS

- PTS & PHYSICIANS MAY HAVE INC CONFIDENCE GOING BY HOME-BASED READINGS VS IN-OFFICE READINGS

WHILE WE'RE ON THE SUBJECT...

ARE YOU FAMILIAR WITH THE NEW ACC/AHA 2017 GUIDELINES FOR MGMT OF HTN?

- ELEVATED BP: SBP 120-129 AND DBP <80.
- STAGE 1 HTN: SBP 130-139, DBP 80-89
- STAGE 2 HTN: SBP>/= 140 OR DBP>/= 90.
- 1ST-LIFESTYLE INTERVENTIONS. WITH DIABETES, ASCVD RISK >10%-->RX FOR ELEVATED BP AND STAGE 1 HTN

WHELTON, PK ET AL. J AM COLL CARDIOL (2017)

Xa INHIBITORS VS LMWH IN PTS WITH CANCER

TREATING VTE IN PTS WITH ACTIVE CANCER

GUIDELINES (2003):

USE LMWH OVER WARFARIN FOR TX OF CANCER-ASSOCTD VTE

LEE, AY ET AL. NEJM 349 (2003), PP. 146-153

STUDY:

- OPEN LABEL, NON-INFERIORITY
- EDOXABAN GROUP: AT LEAST 5D OF LMWH F/B EDOXABAN ONCE DAILY X 6 MOS
- DALTEPARIN GROUP: ONCE DAILY SQ INJ X 6 MOS

RASKOB, GE ET AL. NEJM 378 (2018), PP. 615-624

STUDY, CONT.

TREATING MDs DETERMINED TX LENGTH-->PTS GOT ORIGINAL RX UP TO 12 MOS

1050 PTS WITH ACTIVE CANCER & ACUTE VTE, SX'IC OR INCIDENTAL DVT/PE. RANDOMIZED. 1046 INCLUDED IN ANALYSIS

LIMITATIONS:

COMPANY SPONSORED

MEDIAN DURATION IN DALTEPARIN GROUP SHORTER

IMPLICATIONS FOR PRACTICE

- EDOXABAN NON-INFERIOR; CAN'T GENERALIZE TO OTHER DOACs
- EDOXABAN + : CONVENIENCE, GREATER ADHERENCE, DEC PAIN, DEC COST, HIGHER QOL
- NEED TO EDUCATE ABOUT INC RISK OF MAJOR BLEEDING, ESP IN PTS WITH GI CANCER

VAGINAL ESTRADIOL

VAGINAL ESTRADIOL FOR POSTMENOPAUSE

STUDY:

302 WOMEN RANDOMIZED:

- ESTROGEN 10MCG +PLACEBO GEL
- PLACEBO TAB + VAG MOISTURIZER
- PLACEBO TAB + PLACEBO GEL

TX EVAL'D: MOST BOTHERSOME SX SEVERITY, VAG SX, SEXUAL FCN, VAG MAT INDEX, WET MOUNT, pH

RESULTS:

-ALL GROUPS HAD IMPROVEMENT BUT DID NOT MEET MEANINGFUL THRESHOLD

-VAG MAT INDEX & pH CHANGED MORE IN ESTRADIOL GROUP→ NO SIG CHANGE IN SX OR SEXUAL FUNCTION

MITCHELL, CM, ET AL. JAMA INT MED; 178(2018); PP. 681-690

LIMITATIONS

TRIAL ENDED IN ONLY 12 WEEKS, BUT MOST WOMEN REACH MAX BENEFIT WITH VAGINAL HORMONE THERAPY 1-3 MOS AFTER START OF TX

IMPLICATIONS FOR PRACTICE

- USE OF VAGINAL LUBRICANT GEL CAN RESULT IN > 50% REDUCTION IN SX OF POSTMENOPAUSAL GENITOURINARY SYNDROME
- ADDITION OF ESTROGEN TAB-->NO GREATER SX IMPROVEMENT
- CONSIDER COST AND SE PROFILE WITH ESTROGEN -->SHARED DECISION MAKING

CONCLUSIONS

1. HIGH RISK HPV SCREENING ALONE Q 5 YRS IS AN OPTION FOR WOMEN 30-65YO
2. CONSIDER ZOLEDRONATE 5MG IV Q 18 MOS FOR WOMEN > 65YO WITH OSTEOPENIA
3. A1C > GOAL + ASCVD-->SGLT2 INHIBITORS OR GLP1 AGONISTS SHOULD BE CONSIDERED

CONCLUSIONS, CONT.

1. HOME BP MONITORING WORKS
2. EDOXABAN IS NON-INFERIOR TO DALTEPARIN FOR TX OF CANCER-ASSOCIATED VTE
3. VAGINAL LUBRICANT GEL EFFECTIVE FOR MGMT OF POSTMENOPAUSAL SX. VAG ESTROGEN NOT SHOWN TO DEC SX.

QUESTIONS?