The Prudent Prescriber

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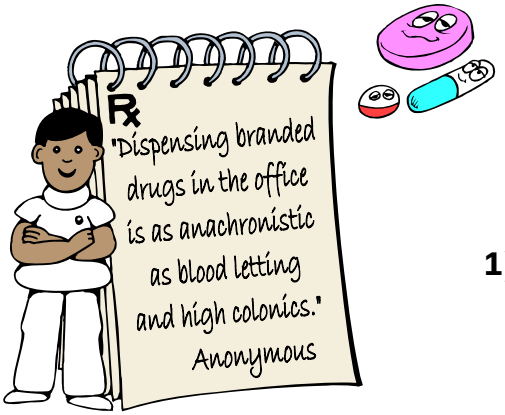


January 2017

Pharm Reps ≠ Rational Prescribing (PR) (RP)

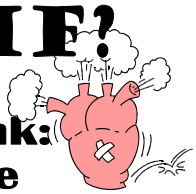
Eight Easy Ways to Add Value to your Medical Care in 2017

1) Two dose 9-valent HPV vaccine works as well as or better than three doses

Investigators, in an international trial, (Iverson et al JAMA 2016 Nov 21) determined that vaccinating 9 to 14-year-old boys and girls with two doses of 9–valent human papilloma vaccine, given six or 12 months apart was non-inferior to the traditional three dose series. Antibody titers were measured one month after receipt of the last dose of each series. At least 98.5% of the participants in each cohort converted to all vaccine serotypes. Children receiving two doses 12 months apart had higher mean antibody titers than those receiving two doses six months apart.

Take Home: The CDC is now recommending switching from a three to a two dose 9-valent vaccine series for boys and girls ages 9 to 14. This schedule should result in higher immunization rates at lower costs. The ongoing reluctance of some parents to vaccinate their 9 to 14-year-olds is sometimes assuaged by reminding them that HPV prevents cervical cancer.

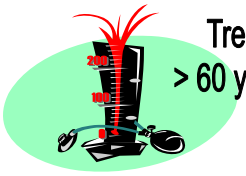
CHF?



Think:
Ace
Aldactone
B-blocker
Dig
Diuretic

Avoid these expensive "me-too" drugs:

Intermezzo
Vimovo
Livalo
Pristiq
Viibyrd
Edarbi
Daliresp



Treat patients > 60 years to 150/90

Antibiotics do NOT

help acute bronchitis

ß-blockers in post-MI save lives

Pill splitters save BIG

NOW AVAILABLE ON THE GENERIC MARQUEE

Frova→frovatriptan
Voltaren gel→diclofenac Na 1% gel
Crestor→rosuvastatin
Nuvigil→armodafinil
Jalyn→dutasteride/tamsulosin
Ortho Tri-Cyclen Lo→Tri-Lo-Marzia, Tri-Lo-Sprintec, & others

2) Quit using injectable hyaluronidase for knee arthritis

Still another study shows that viscosupplementation for knee osteoarthritis does not work. This systematic review (J Bone Joint Surgery Am 2015 December 16:97 (24): 2047–60.) showed that when only double blinded, sham controlled trials with an "N" > 60 were included, there were no significant clinically important differences of hyaluronidase treatment over placebo.

Take Home: Long needles have a huge placebo effect. Quit sending patients to orthopods who insist on continuing this expensive, archaic treatment modality. Reminder: In 2013 the American Academy of Orthopedic Surgeons recommended against the use of hyaluronidase injections.

3) "Is vitamin D supplementation good for anything?"

Quit ordering vitamin D levels

- No consensus exists on the definition of vitamin D deficiency.
- The accuracy of the tests to determine vitamin D deficiency is difficult to determine because of the lack of studies that use internationally recognized reference standards.
- The USPSTF found no studies that evaluated the direct benefit of screening for vitamin D deficiency in adults.
- The American Society for Clinical Pathology recommends against screening for vitamin D deficiency in the Choosing Wisely campaign.

Quit prescribing vitamin D for healthy, asymptomatic persons living in the community without a history of osteoporosis or fractures.

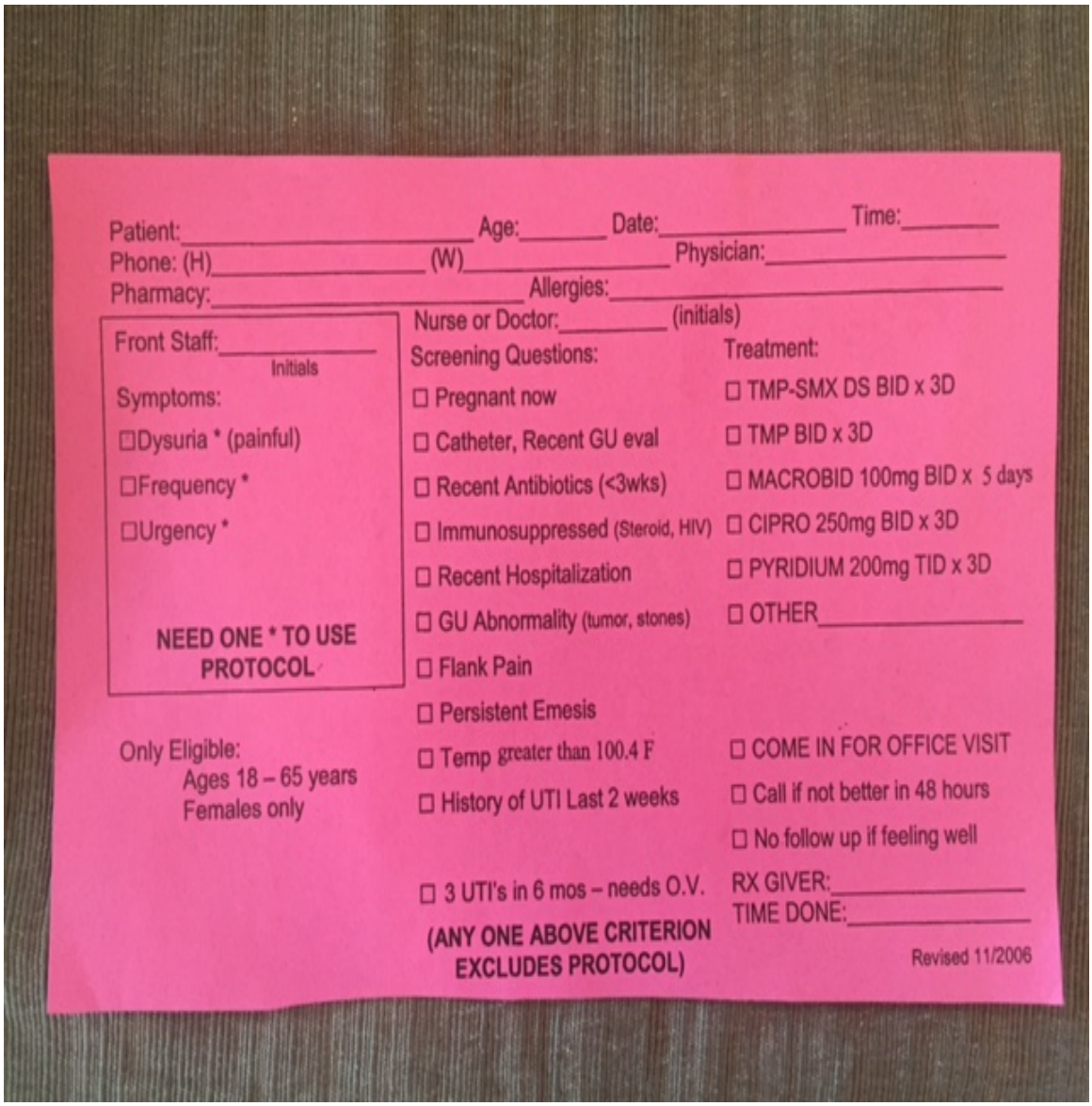
- The USPSTF's continued recommendation is that there is insufficient evidence to recommend for against vitamin D supplementation in this group of persons.
- The USPSTF's previous "B" recommendations for supplementing community dwelling adults older than 65 and at risk for falls has been refuted by Bischoff – Ferrari (JAMA Internal Medicine, February 2016) that showed that vitamin D supplementation resulted in a higher risk of falling. NNH = 6.

Take Home: I wasted tens of thousands of dollars in my career chasing vitamin D levels and chastising patients about what I knew not.

4) Use a simple protocol to treat selected females over the phone for urinary symptoms.

In the face of payment reform, this is a tried and true, patient pleasing, cost-effective, evidence-based intervention. (see protocol below)

Take Home: My former practice utilized this protocol for more than 20 years without known significant harms. The nursing staff is most effective in utilizing this protocol as they do not bend in implementing it. In my opinion, ciprofloxacin and other fluoroquinolones have no place in this protocol.



Patient:_____ Age:_____ Date:_____ Time:_____
Phone: (H)_____ (W)_____ Physician:_____
Pharmacy:_____ Allergies:_____

Front Staff:_____ Initials

Symptoms:
☐Dysuria * (painful)
☐Frequency *
☐Urgency *

NEED ONE * TO USE PROTOCOL

Only Eligible:
Ages 18 – 65 years
Females only

Nurse or Doctor:_____ (initials)

Screening Questions:
☐ Pregnant now
☐ Catheter, Recent GU eval
☐ Recent Antibiotics (<3wks)
☐ Immunosuppressed (Steroid, HIV)
☐ Recent Hospitalization
☐ GU Abnormality (tumor, stones)
☐ Flank Pain
☐ Persistent Emesis
☐ Temp greater than 100.4 F
☐ History of UTI Last 2 weeks
☐ 3 UTI's in 6 mos – needs O.V.

(ANY ONE ABOVE CRITERION EXCLUDES PROTOCOL)

Treatment:
☐ TMP-SMX DS BID x 3D
☐ TMP BID x 3D
☐ MACROBID 100mg BID x 5 days
☐ CIPRO 250mg BID x 3D
☐ PYRIDIUM 200mg TID x 3D
☐ OTHER_____
☐ COME IN FOR OFFICE VISIT
☐ Call if not better in 48 hours
☐ No follow up if feeling well

RX GIVER:_____
TIME DONE:_____

Revised 11/2006

5) Make the new diagnosis of hypertension based on home or ambulatory blood pressure monitoring.

In August 2011 the National Institute for Health and Clinical Excellence (NICE, the UK equivalent of our USPSTF) made the following recommendation, "The diagnosis of primary hypertension should be confirmed using 24 hour ambulatory blood pressure monitoring as a gold standard rather than be solely based on measurements taken in the office."

In their October 2015 update, the USPSTF made the following recommendations:
>Screen for high blood pressure in adults aged 18 and older (Grade A)
>Obtain BP measurements outside of the clinical setting for diagnostic confirmation before starting treatment. (Grade A)

Multiple epidemiological studies (Annals of Internal Medicine, volume 162, #3, February 2015) over the last 20 years reveal that hypertension diagnosed in the office is often (5%-65%) over-diagnosed compared with home or ambulatory blood pressure monitoring.

A paper in Circulation, 2005 reminds us of the factors that contribute to the high false positive rate of hypertension diagnosed in the office.

- Empty bladder before checking BP
- Support the back of the patient
- Keep the patient's legs uncrossed
- Do not talk to the patient while taking their BP
- Support the patient's arm at the level of the heart
- Support the patient's feet
- Put the cuff on the patient's bare arm

Take Home: Confirming the diagnosis of hypertension outside the office will avoid over-diagnosis/false positives, avoid labeling patients inappropriately and save money.

6) Think LARC (Long Acting Reversible Contraception)

LARC methods are the most effective reversible methods of contraception; once they have been inserted, they do not require regular action on the part of the wearer. They are considered first-line options for adolescents by the AAP and ACOG.

In a systematic review of nine studies (26,907 participants) comparing intrauterine device (IUD) with other methods of contraception in women ≤25 years, the 12-month continuation rates were highest for LARC methods (approximately 85 percent compared with 40 to 50 percent for non-LARC methods) (Usinger et al J Pediatr Adolesc Gynecol 2016:659)

Up to Date provides the following talking points in describing IUDs and contraceptive implants to adolescent patients:

- **"IUDs** are completely reversible contraceptive methods placed in the uterus. There are two types of IUDs. One is hormonal and lasts up to three or five years. The other is nonhormonal; it releases copper and can last up to 10 years. Either type can be removed at any time if you wish to become pregnant or want to switch to a new method. They are very safe and have the highest satisfaction and continuation rates of any contraception method."
- "The **contraceptive implant** is a single flexible plastic rod placed under the skin of your upper arm. It is hormonal and lasts up to three years. It can be removed if you wish to become pregnant or would like to switch to a different method."
- "With both methods, the pregnancy rate is less than 1% per year in typical patients. Fertility returns quickly after removal of these devices."

Take Home: The unintended pregnancy rate among all women in United States is about 50%. Among adolescents, ages 15 to 19 years, the unintended pregnancy rate is 80%. These are deplorable statistics! LARC is an important tool for many young women. If the barriers of confidentiality and cost make care in your office difficult, Planned Parenthood and some County Health Departments are great resources. The Mesa County Health Department (970-248-6900) has three excellent clinicians (two CNMs and a FNP) with lots of experience with LARC.

7) Add prednisone to your treatment of patients with community-acquired pneumonia

In a multicenter, double-blind Swiss study, (Blum, Lancet 385 (9977): 1511, April 18, 2015) 785 immuno-competent adults (median age, 74) hospitalized for community acquired pneumonia were randomized to a one week course of adjunctive prednisone (50 mg daily) or placebo in addition to standard antibiotics.

Results: The median time to clinical stability, defined as stable vital signs for at least 24 hours, was 3.0 days in the prednisone group versus 4.4 days in the placebo treated controls. The prednisone group had a significantly shorter duration of IV antibiotic treatment (4 versus 5 days) and earlier hospital discharge (6 versus 7days) than controls. Adverse events consistent with steroid use were more frequent in patients randomized to prednisone (24% versus 16%), but inpatient hyperglycemia recording insulin treatment was principally responsible for this difference.

Take Home: A brief course of prednisone was safe in patients with community-acquired pneumonia and was associated with a reduction in time to stability of vital signs and earlier discharge. Although this study was done in in-patients, if I develop community acquired pneumonia this winter, I will be looking for some prednisone for my outpatient treatment.

8) Loosen up in 2017, particularly with glycemic control of your type 2 diabetics

- The evidence accrued in the past 2 decades consistently demonstrates **no** significant benefit of tight glycemic control on patient-important micro- and macrovascular outcomes, with the exception of a 15% relative-risk reduction in nonfatal myocardial infarction.
- Specifically, this evidence reported no significant impact of tight glycemic control on the risk of dialysis/transplantation/renal death, blindness, or neuropathy. There is also no significant effect on all-cause mortality, cardiovascular mortality, or stroke.
- Despite this, most published statements and all guidelines unequivocally endorse tight glycemic control to prevent microvascular and macrovascular complications.
  Circulation: Cardiovascular Quality and Outcomes, Sept. 2016

Take Home: The notion that tight glycemic control is clearly beneficial does not hold in the face of the evidence accrued during the past decade. We clinicians need to fight the uphill battle against diabetes guidelines, health plan "quality-of-care" measures, and patient-directed marketing that continue to focus on achieving tight glycemic control.