Multiple Small Feedings Of The Mind In Internal Medicine

Naresh Pathak, M.D., F.A.C.P., F.A.A.H.P.M.

Associate Clinical Professor,
(KP Nova South Eastern University School of Medicine)
Adjunct Faculty,
(UM, FAU & FIU Schools of Medicine)

Multiple Small Feedings Of The Mind In Internal Medicine

Objectives

- Address **commonly encountered** medical problems in Primary Care Practice that **YOU** wanted to hear about
- Provide **focused information** that is evidence based, practical and immediately usable
- **Keep it brief** and to the point – to prevent audience from falling a sleep

Multiple Small Feedings Of The Mind In Internal Medicine

1 – Women's Health

2 – Geriatric Medicine

3 - Anticoagulation

Multiple Small Feedings Of The Mind In Internal Medicine

1 – Women's Health


CARTOONSTOCK
Search ID: pjun1531

MSFM – Women's Health

How Tempted are you

To give

Hormone Therapy

To that post-menopausal female patient

Who complains every visit

About her

Vaso-Motor Symptoms?

MSFM – Women's Health

Case # 1

- 58 yo wf comes to office with vaso-motor symptoms that are affecting the quality of her life
- Hx = Stage I HTN, mild Hyperlipidemia, non-smoker
- Vitals and PE unremarkable
- She inquires about Hormone Therapy

MSFM – Women's Health

Case # 1

USPSTF Guidelines for HT in Postmenopausal Women

JAMA; 2017 Dec 12; 318(22):2224-2233

US Preventative Services Task Force

MSFM – Women's Health

Case # 1

- Estrogen Tx given to 40% of women (1988-1994)
- Then - Women's Health Initiative (WHI) showed harm with Tx
- **So** - Estrogen Tx went down to 10% (2010)
- (Estrogen + Progesterone) = Reduced the risk of Fx & DM
- **Then** - 18 Clinical trials reviewed (since 2012 USPSTF recommendation)

MSFM – Women's Health

Case # 1

- HT increased the risk of – Invasive Breast Cancer, Venous Thromboembolism, CAD
- Risk >> Benefit
- This is for Post Menopausal Asymptomatics
- Not for Premature Ovarian Failure

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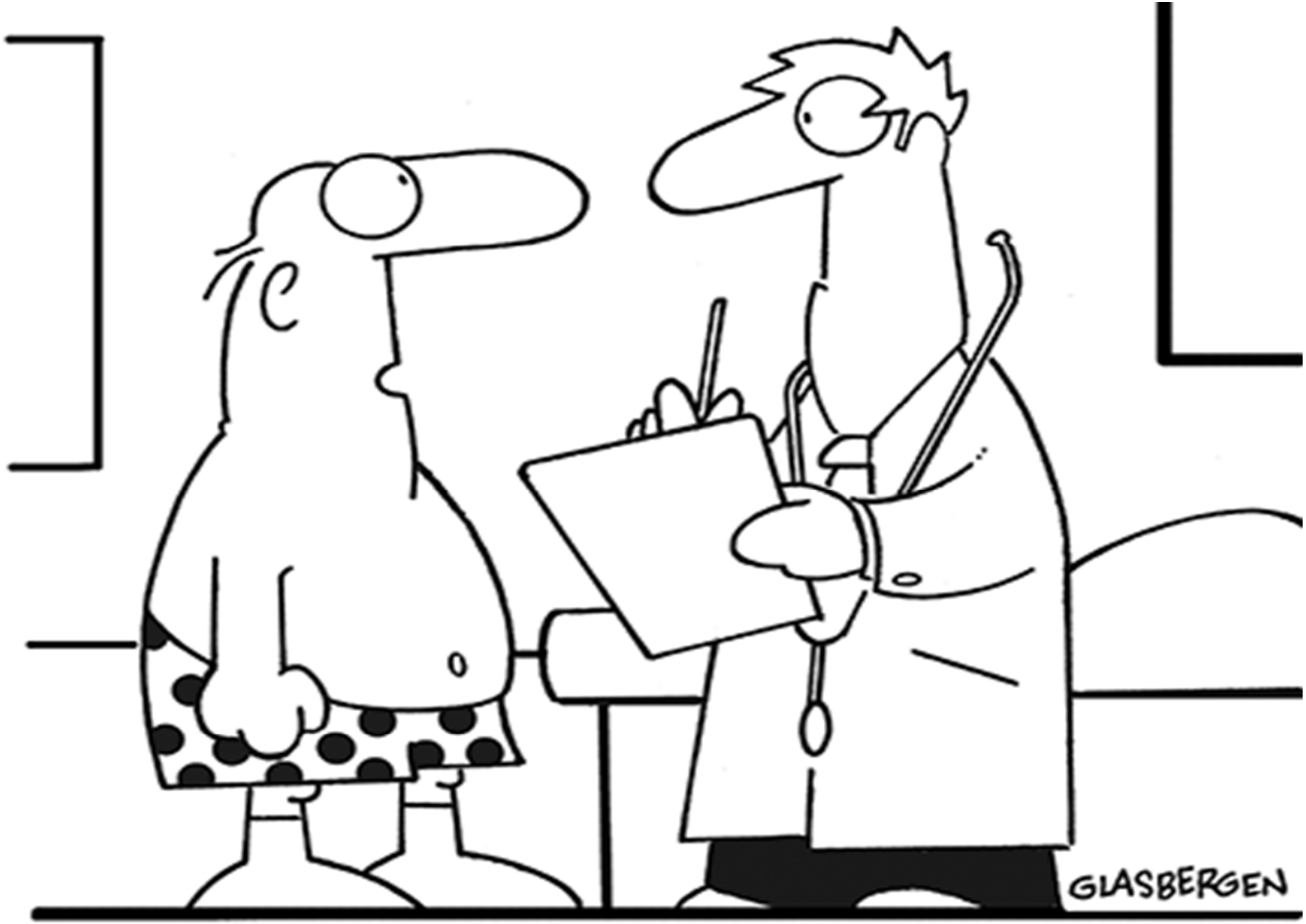
USPSTF Recommends **AGAINST**

1 - Combined Estrogen & Progesterone for the Primary Prevention of Chronic Conditions in Post Menopausal Women

OR

2 - Estrogen alone for the Primary Prevention of Chronic Conditions in post menopausal women who have had hysterectomy

(Type D Recommendation for both)


GLASBERGEN

MSFM – Women's Health

How well-versed are you
in Recommending
Nutritional Supplements
to your Patients?

MSFM – Women's Health

Case # 2

- 75 yo bf new to your practice has Hx of DJD, Osteopenia & HTN
- She is well functional and independent
- Her vitals and PE are normal
- She wants your opinion on Calcium and Vitamin D Supplementation for fracture prevention

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Association Between Calcium or Vitamin D Supplementation and Fracture Incidence in Community-Dwelling Older Adults (Systematic Review and Meta-Analysis)

JAMA. 2017 Dec 26; 318(24):2466-2482

Zhao J G, et al

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Case # 2

- 33 Randomized Trials (n = 51,145)
- Calcium **OR** Vit D = NO significant association with Hip Fx (Ca:- RR=1.53, Vit D:- RR=1.21)
- Calcium **+** Vit D = NO significant association with Hip FX (RR=1.09)
- Calcium **OR** Vit D (OR **Combined** Tx) = NO significant association with Vertebral, Non-Vertebral or Total Fx

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Case # 2 (3 older studies - contrasted)

- **1 -** "Vitamin D and calcium supplementation prevents osteoporotic Fx in elderly community dwelling residents: A pragmatic population-based 3-year intervention study" (Larsen, E R et al; J Bone Mineral Res. 2004; 19:370-378)

- **2 -** "A higher dose of Vitamin D reduces the risk of falls in nursing home residents: A randomized, multiple-dose study" (Broe, K E et al; J of Amer Geriatr Soc. 2007;55:234-239)

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Case # 2 (3 older studies - contrasted)

- **3 –** Fracture prevention with Vitamin D supplementation. A meta-analysis of randomized controlled trials. (Bischoff-Ferrari H A, et al; JAMA. 2005; 293(18)257-2264)

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Case # 2 (3 older studies)

- Fractures decreased with Calcium & Vitamin D
- Falls Decreased with Vitamin D in NH residents
  (due to increased muscle strength in vitamin D deficient patients?)(supplement alone did not reduce falls)
- 700 iu – 800 iu of Vitamin D (NOT 400 iu) = Reduced hip & non-vertebral Fx in ambulatory OR institutionalized older adults

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Case # 2

So …….. Use Common Sense

- Vitamin D has many "non-bone benefits"
- Vitamin D levels are lower in population due to avoidance of SUN due to risk of skin Ca
- Colon Cancer recurrence was higher after cancer Tx in patients with low Vitamin D levels
- Checking 25 OH-Vitamin D level is reasonable (keep level in mid-range = 45 - 65)
- Recommend diet, rich in calcium
- Recommend "resistance" exercises
- Remember --> Bone health begins in-utero !!!

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Case # 3

- 80 yo wf with hx of osteoporosis stable on Bisphosphonate Tx for 10 years wants to "get off" the Tx – because she heard of "side effects"
- Hx = HTN, DJD, Osteoporotic Fx 10 years ago, DM Type 2
- Asymptomatic & functional

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Case # 3

Long-term oral bisphosphonate therapy and fractures in older women: The Women's Health Initiative Study

J Amer Geriatric Soc.

Drieling R L et al; 2017: 65(9)1924-1931

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Case # 3

- Women's Health Initiative reported data
- n = 5120 (median age = 80) (f/u = 4 yrs)
- Duration of Tx (Tx group)= 3, 5, 6-9, 10-13 yrs
- Duration of Tx (control group) = 2 yrs
- Fx Risk = (10-13 yr Tx group) >> (2 yr group)
- HR = 1.30 (NO prior Fx group = Prior Fx group = Cancer group)
- Hip Fx = Vertebral Fx = Wrist Fx

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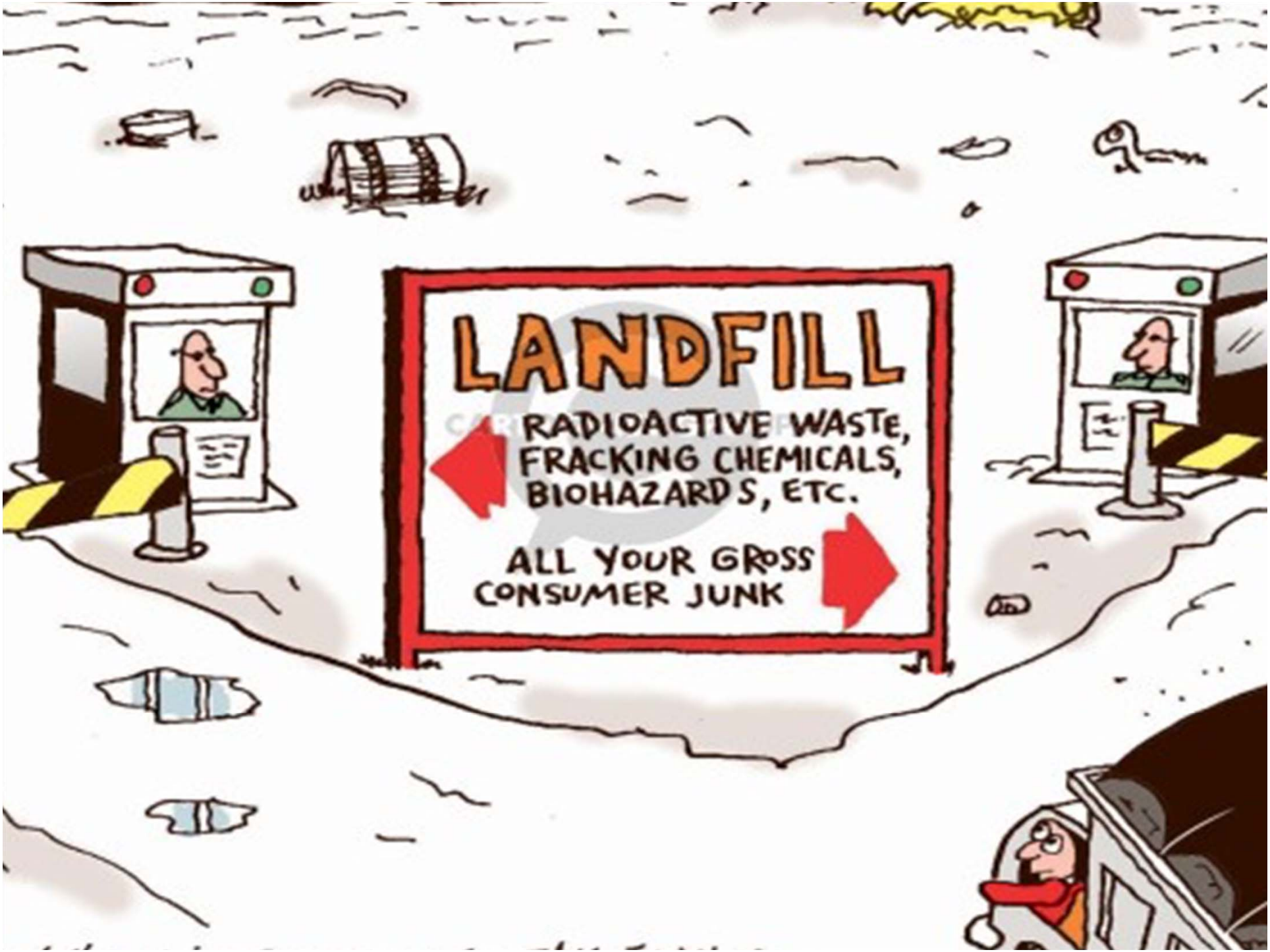
Case # 3

- ACP guideline recommends Tx of osteoporosis (with T score < 2.5) with pharmacologic Tx for 5 years (Treatment of low bone density or osteoporosis to prevent fractures in men and women: A clinical practice guideline update from the American Collage of Physicians. Ann Intern Med. 2017; 166(11):818-839)
- Risk of Osteo-Necrosis of the Jaw & atypical femoral Fx increase with duration of Tx
- Limiting Bisphosphonate Tx to 5 yrs or less is recommended


LANDFILL
RADIOACTIVE WASTE, FRACKING CHEMICALS, BIOHAZARDS, ETC.
ALL YOUR GROSS CONSUMER JUNK

MSFM – Women's Health

Cleanliness

Is Next to Godliness

BUT

It has its Price

MSFM – Women's Health

Case # 4

- 60 yo bf comes with chronic progressive SOB
- Hx = HTN, DJD, non-smoker, no asthma
- Occupation = House cleaning
- Vitals, EKG, CXR, Pulse Ox (RA) = normal
- Exercise Stress Test = SOB, no ST-T changes
- PFT = FEV1 75 % of predicted (no reversibility)

MSFM – Women's Health

Case # 4

Cleaning at home and at work in relation to lung function decline and airway obstruction

Amer J Respir Crit Care Med.

ePub; 2018 Feb 16; Svanes, et al

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Case # 4

- n = 6230
- Women cleaning at home & at work
- 20 year Cohort Study
- 22 Study centers
- At least 1 Lung Function Study done

MSFM – Women's Health

Case # 4

- Women exposed to "cleaning chemicals" at work OR at home had more rapidly declining FEV1, FVC (-22.1, p=0.01)
- Cleaning sprays & liquids had similar effects
- Men were NOT affected
- No significant association with COPD
- i.e. -- ASK ABOUT OCUPATIONAL EXPOSURE TO CLEANING CHEMICALS OR ENVIRONMENTAL POLUTIONS IN WOMEN WITH DIMINISHED LUNG FUNCTION AND NO HX OF SMOKING OR ASTHMA

Multiple Small Feedings Of The Mind In Internal Medicine

2 - Geriatrics


RETIREMENT HOME
SPEED DATING

MSFM – Geriatrics

When you see a patient in the office or the hospital, you stratify their health risk from

"Medical Perspective"

HAVE YOU EVER

Thought of looking at them from the

Point of view of

"Financial Risk?"

(Should This Be The 5th Vital Sign Instead of The "Pain"?)

"When you review your retirement fund then

MSFM – Geriatrics

Case # 1

Wealth-Associated Disparities in Death and Disability in the United States and England

JAMA Intern Med; 2017 October 23

Makaroun L K, et al

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Case # 1

- Examined Relationship between WEALTH & MORTALITY (not just "current income")

- Compared age < 65 & >65 (i.e. access to government sponsored health insurance, OR access to care)

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Case # 1

- n = 12,173 (USA), n = 7,599 (UK)
- Age Stratification = (54 – 64) vs. (66 – 76)

- As WEALTH decreased → DEATH & DISABILTY increased (over 10 yrs & across the quintiles)
- Wealth of < $39,000 = 17% Mortality Risk (HR = 3.3), 48% Disability Risk (HR = 4.0)
- Wealth of > $560,000 = 5% Mortality Risk, 15% Disability Risk

MSFM – Geriatrics

How Successful are you in
Getting your Elderly
Patients

OFF Of Their
Sleeping Pills?

(Are you kidding me? – That's a joke … right?)


GLASBERGEN

MSFM – Geriatrics

Case # 2

- 88 yo wf comes with her daughter who wants to discuss functional decline and future care planning
- Hx – mild Dementia, HTN, DJD, COPD
- Medications – Zolpidem 10 mg HS x 15 Yrs. (+ others)

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Case # 2

The Use of Benzodiazepines Receptor Agonists (BZRA) and the risk of Hospitalization for Pneumonia: A nationwide Population-based nested case-controlled Study

CHEST. 2017;153:161-171

Chen T, et al

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Case # 2

- n = 12,002 (between 2002 – 2012)
- Risk of Hospitalization for Pneumonia = BZRA use (OR = 1.86), Benzo use for Sleep (OR = 2.42), Benzo use for Anxiety (OR = 1.53), Non-Benzo Hypnotic Agent use (OR = 1.60), Midazolam use (OR = 5.77)
- Increased risk of MVA with use (FDA Announcement: 2013; Jan 10)

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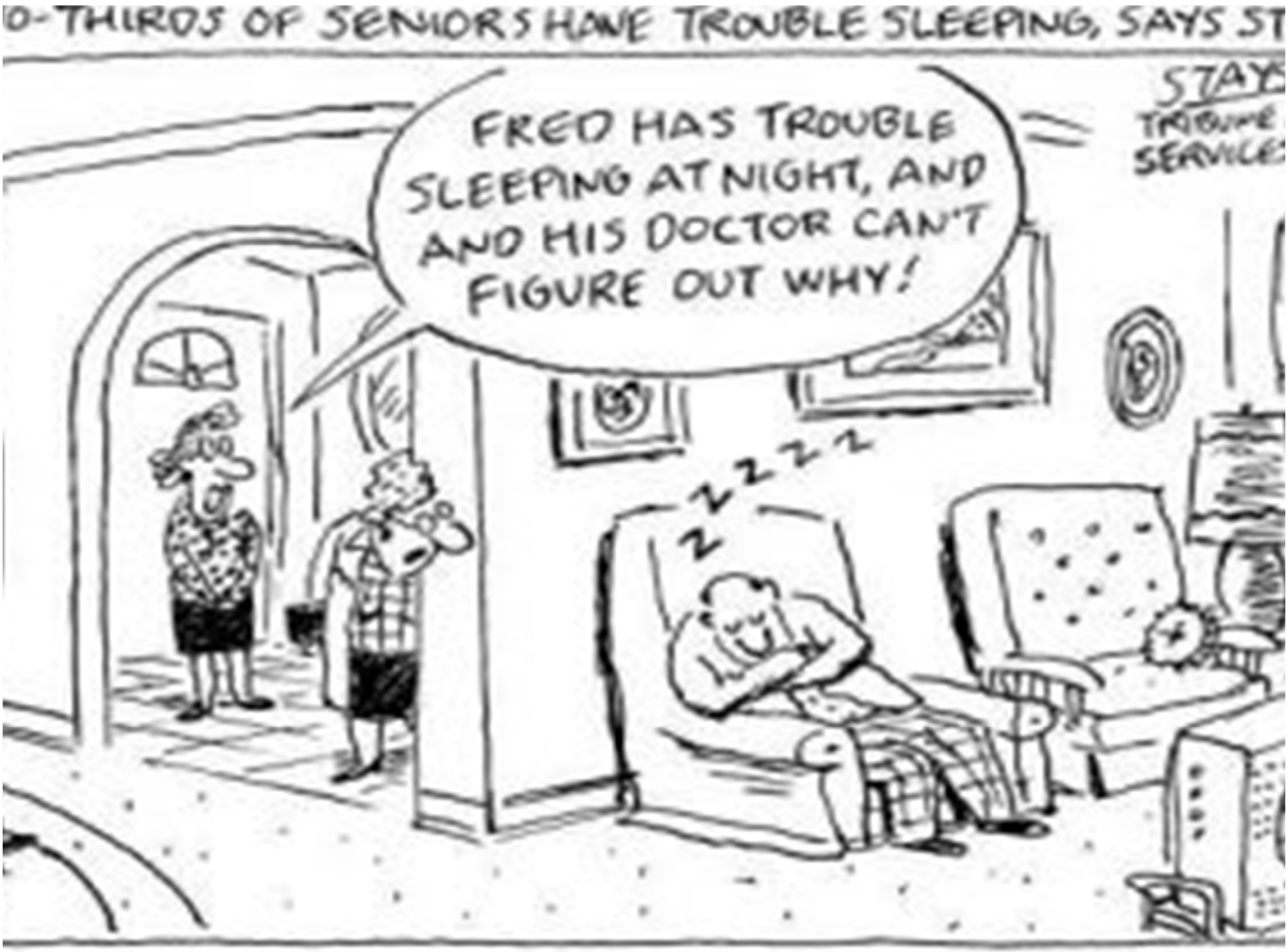
"What can I get you in your Coffee Sir?"

"I'll have Cream and Sugar,
BUT
My Dad will take
a pinch of Methylphenidate,
Please"


O-THIRDS OF SENIORS HAVE TROUBLE SLEEPING, SAYS ST
FRED HAS TROUBLE SLEEPING AT NIGHT, AND AND HIS DOCTOR CAN'T FIGURE OUT WHY!
Z Z Z Z
STAY
TRIBUNE
SERVICE

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Case # 3

Methylphenidate for Apathy in Community-Dwelling Older Veterans with mild Alzheimer's Disease: A Double-Blind Randomized Placebo-Controlled Trial

Am J Psychiatry. 2017; Sept 15;

Padala R R et al

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Case # 3

- n = 60 !!!, (Duration = 12 weeks)
- Mean Age = 77 yrs
- Evaluation at 4, 8, 12 weeks
- Measured by "Clinical Global Impression Scale (CGI)

- Improved = Apathy, Depression, Functional Status, Cognition .... & thus ..... care-giver burden

MSFM – Geriatrics

So…..

Now with Opioid Crisis

Are you Switching

Your “Arthritic Patients”

To NSAIDs?


WELL, AT LEAST WE WERE HALF RIGHT!..
PAIN
FDA
VIOXX:
KILLER
FDA APPROVED
MERCK & CO., INC.
VIOXX USERS


WILDT
CARTOONSTOCK

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Case # 4

The Risk of Major NSAID Toxicity with Celecoxib, Ibuprofen or Naproxen: A Secondary Analysis of the PRECISION Randomized Controlled Clinical Trial

Am J Med. 2017; July 26;

Solomon, D H et al;

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Case # 4

- n = 24,081 (with OA & RA)
- All with Moderate CV Risk & Symptomatic Arthritis
- Tx with Celecoxib OR Ibuprofen OR Naproxen
- All received PPI
- Secondary Analysis of PRECISION Trial

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Case # 4

- 5% = Major Toxicity over 1-2 yrs
- Toxicity = CV events, GI bleed, Kidney Injury & All Cause Mortality
- Toxicity = Celecoxib (4.1%), Ibuprofen (5.3%), Naproxen (4.8%)
- After adjusting for ASA and Geographic Region –> Ibuprofen (41% higher) & Naproxen (19% higher) Risk → THEN → Celecoxib Risk

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3 - Anticoagulation


YOU CAN'T GET THE GOOD STUFF ANYMORE... I SAW THIS DAY COMING WHEN THEY INVENTED BLOOD THINNERS.

MSFM – Anticoagulation

Just When you Thought That

ASA was for **Arterial**

And

Anticoagulation was for **Venous**

"Clogged Plumbing" …….

Than comes This ……

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Case # 1

Aspirin or Rivaroxaban for VTE Prophylaxis after Hip or Knee Arthroplasty

N Engl J Med. 2018 Feb 22;378:699-707

Anderson D R et al;

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Case # 1

- n = 3424 (almost Equal Total Hip & Total Knee Sx)
- All Received Rivaroxaban 10 mg Post-Op x 5 d
- Then Randomized
- Aspirin 81 mg **OR** Rivaroxaban 10 mg
- Total Tx = 14 d for Knee & 30 d for Hip
- NO difference in VTE at 90 d (0.06% vs 0.07%)
- NO difference in Major Bleed (0.04% vs 0.03%)
- No difference in Clinically Important Bleed (1.2% vs 1.0%)

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What About
Cancer Associated VTE?

(where Low-Molecular Wt Heparin in past was Superior to Vitamin K Antagonists, Creating Logistical problem in Cancer Patients)

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Case # 2

Edoxaban for the Treatment of Cancer-Associated Venous Thromboembolism

N Engl J Med. 2018 Feb 15;378:615-624

Raskob G E et al;

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- n = 1046 (Modified Intention-to-Tx Analysis)
- Low Molecular Wt Heparin x 5 days first
- Then Edoxaban 60 mg/d **vs.** Deltaparin 200 iu/Kg/d for 30 d followed by 150 iu/Kg/d
- Duration = 6 – 12 months
- Recurrent VTE (+) Major Bleed (as follows)
- Edoxaban = 12.8% vs. Deltaparin (11.3%)
- VTE Alone = Edo (7.9%) vs. Heparin (11.3%)
- Major Bleed = Edo (6.9%) vs. Heparin (4.0%)

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If You can Give **ASA**

for **VTE** Prevention after Hip & Knee Sx

(=Venous Dz)

Can you give **NOAC**s for **PVD**?

(=Arterial Dz)


Pains, you take a baby aspirin.

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Case # 3

Rivaroxaban with or Without Aspirin in Patients with stable Peripheral or Carotid Artery Dz

Lancet; 2018 Jan 20; Anand, Bosch et al;

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Case # 3

- n = 7470 (558 centers)
- Rivaroxaban (5mg BID) + ASA **vs.** ASA alone
- Combined CV Death + MI + CVA (as follows)
- R + A = 5% **vs.** ASA = 7% (HR=0.72, p=0.0047)
- Major Adverse Amputation (as follows)
- R + A = 1% vs. ASA = 2% (HR=0.54, p=0.037)
- Major Bleed (as follows)
- R + A = 3% **vs.** ASA = 2% (HR=1.61, p=0.0089)

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Case # 3

- Rivaroxaban + ASA slightly better than ASA alone or Rivaroxaban alone
- BUT – Combination increased Bleeds
- Rivaroxaban 5 mg BID = ASA alone

(Not yet for main stream … Cost?)

"I'm going to prescribe something that works like aspirin but costs much, much more."

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"Thinner the Blood Better it is"

OR

IS IT?

What about

NOACs and Mortality form Intra-Cranial Hemorrhage (ICH)?

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Case # 4

Association of Intracranial Hemorrhage among patients taking Non-Vitamin K Antagonists vs. Vitamin K Antagonists Oral Anticoagulants with In-Hospital Mortality

JAMA. 2018;319(5):463-473

Inohara T et al;

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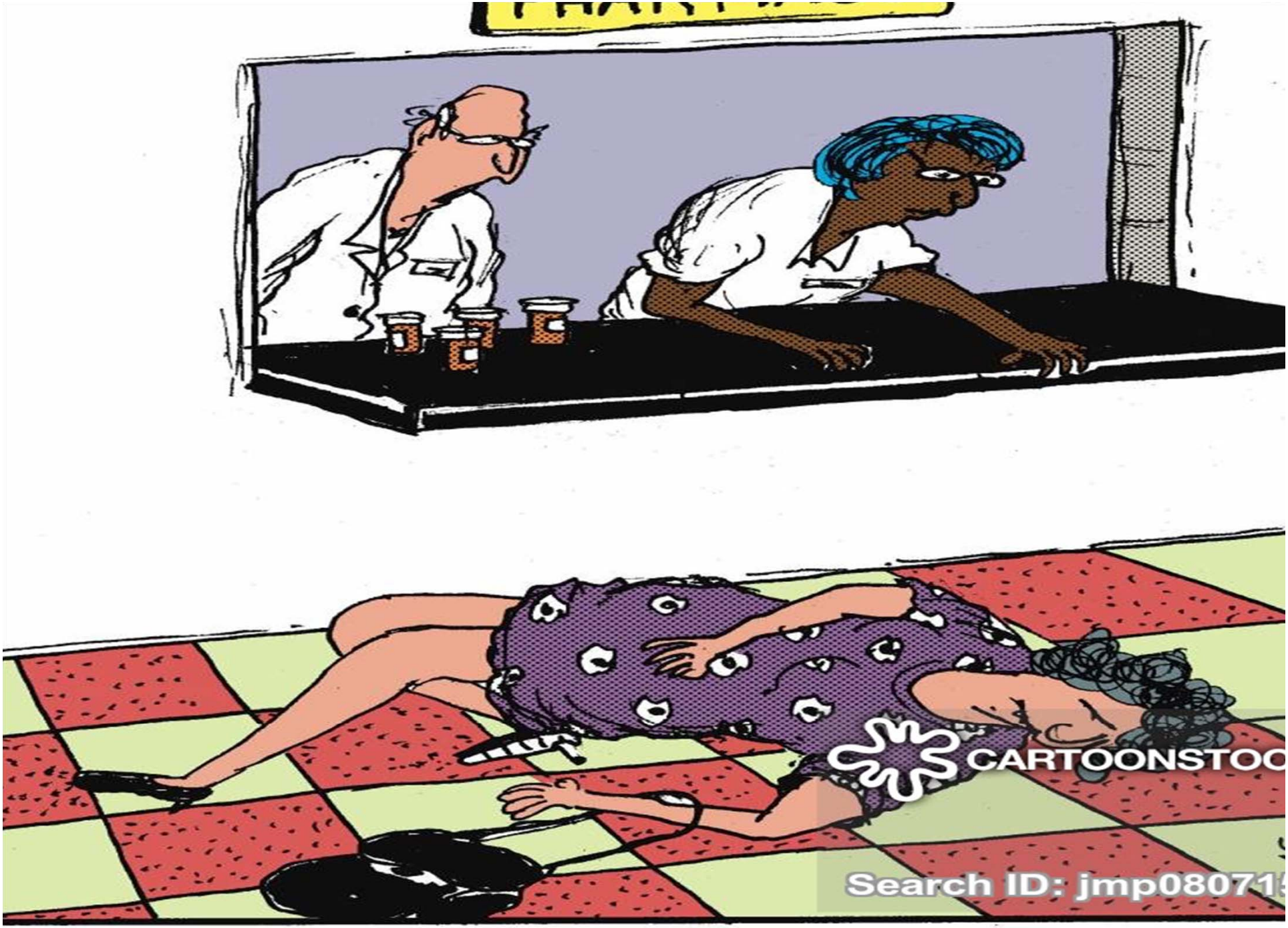
Case # 4

- Retrospective Cohort Study (n = 141,311)
- In-Hospital Mortality Assessed
- Warfarin **vs.** NOACs **vs.** 1 or 2 Anti-Plt drugs
- Mortality = W (32.6%), N (26.5%), AP (22.5%)
- Adjusted Risk Difference = N < W (by 5.7%)

MSFM – Anticoagulation

When was the last time
You saw a
Patient with Pulmonary Embolism
Present with the Syncope?

(Of Course there are people who consider PE as differential Dx for everything including “Baldness”!)



"She's going to need a prescription for

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Case # 5

Prevalence of Pulmonary Embolism in Patients with Syncope

JAMA Intern Med; ePub 2018 Jan 29;

Costantino, et al

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Case # 5

- Prospective Observational Study
- Database from US, Canada, Denmark & Italy
- n = 1,671,944 (with Syncope) (PE as follows)
- Prevalence = 0.06% - 0.55% (all patents)
- Prevalence = 0.15% - 2.10% (hospitalized Pt)
- At 90 days = 0.14% – 0.83% (all Pt)
- At 90 days = 0.35% - 2.63% (hospitalized Pt)
- Hospitalization INCREASED VTE risk by 3X

Multiple Small Feedings Of The Mind In Internal Medicine

Remember …….

Most things you know today will be obsolete in the near future ...

So ....

Everything, including our thinking must change and evolve with time

Multiple Small Feedings Of The Mind In Internal Medicine

Confucius once said about

The Change:

Politicians and **diapers** should be changed regularly

And

Both for the **SAME** reason

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Unfortunately ……

We have only 2 choices
for the Presidedency

While 50 for Miss America

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Contact:

jaima310@gmail.com