Adding pravastatin for primary prevention in people older than 65 did not appear to reduce mortality.\(^1\) SOR:(B)

The ACP and AAFP recommend treating patients 60 and older for SBP 150 mmHg or higher. Target SBP less than 140 in patients with h/o CVA or TIA. Some patients at higher CV risk will benefit from a target SBP of 140 or less.\(^2\) SOR:(A)

For osteoporosis, use alendronate, risedronate, zoledronic acid or denosumab. Treat osteoporotic women for 5 years and don’t do DEXA during those 5 years.\(^3\) SOR:(A)

Vertebroplasty reduces pain for acute (<6 weeks) compression fractures. It may work best in those with fractures at the TL junction (T11-L2) and in the first 3 weeks.\(^4\) SOR:(B)

A Goals of Care decision aid given to decision-makers of severely demented patients improved communication scores and reduced hospital transfers.\(^5\) SOR:(B)

The simple 2 questions screen works well in older adults: In the last month, a) Have you been troubled by feeling down, depressed or hopeless? b) Have you experienced little interest or pleasure in doing things? A yes answer to either is a positive screen.\(^6\) SOR:(A)

Screening VA patients for lung cancer using low-dose CT scan found that about 60% had a positive test. About 1.5% had lung cancer, leading to a > 95% false positive rate. 40% also had incidental findings requiring follow-up or evaluation of some sort.\(^7\) SOR:(C)

Quadrivalent recombinant influenza vaccine (RIV4) is probably a little better than standard quadrivalent vaccine (IIV4). (NNT = 100)\(^8\) SOR:(B)

Pill reminders appear to not work.\(^9\) SOR:(B)

Cranberry capsules do not appear to reduce the incidence of urinary tract infections in women in the nursing home.\(^10\) SOR:(B)

Nitrofurantoin does not appear to work better than other agents for prophylaxis to prevent recurrent UTIs in women, but it does cause increased adverse reactions (mostly GI).\(^11\) SOR:(A)

Over 2 years, q 3 mo injections of triamcinolone did not improve pain or function, but decreased cartilage thickness in knees with OA.\(^12\) SOR:(B)

Spironolactone 25 mg daily appears to reduce effusions and knee pain in people with OA.\(^13\) SOR:(B)
This nonblinded study found that wrapping arthritic knees works roughly as well as topical diclofenac, at least for 4 weeks. SOR:(B)

Men (65 yrs or older) with low testosterone levels had some improvements in sexual function, but no benefit in vitality or walking distance with testosterone replacement to the normal range of younger men. SOR:(B)

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<tr>
<th>Strength of recommendation (SOR)</th>
<th>Basis for recommendation</th>
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<tr>
<td>A</td>
<td>Consistent, good-quality patient-oriented evidence</td>
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<tr>
<td>B</td>
<td>Inconsistent or limited-quality patient-oriented evidence</td>
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<tr>
<td>C</td>
<td>Consensus, disease-oriented evidence, usual practice, expert opinion, or case series for studies of diagnosis, treatment, prevention, or screening</td>
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References

1. Han BH, Sutin D, Williamson JD, et al. Effect of Statin Treatment vs Usual Care on Primary Cardiovascular Prevention Among Older Adults: The ALLHAT-LLT Randomized Clinical Trial. JAMA Intern Med 2017; doi:10.1001/jamainternmed.2017.1442. Abstract: Importance: While statin therapy for primary cardiovascular prevention has been associated with reductions in cardiovascular morbidity, the effect on all-cause mortality has been variable. There is little evidence to guide the use of statins for primary prevention in adults 75 years and older. Objectives: To examine statin treatment among adults aged 65 to 74 years and 75 years and older when used for primary prevention in the Lipid-Lowering Trial (LLT) component of the Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT-LLT). Design, Setting, and Participants: Post hoc secondary data analyses were conducted of participants 65 years and older without evidence of atherosclerotic cardiovascular disease; 2867 ambulatory adults with hypertension and without baseline atherosclerotic cardiovascular disease were included. The ALLHAT-LLT was conducted from February 1994 to March 2002 at 513 clinical sites. Interventions: Pravastatin sodium (40 mg/d) vs usual care (UC). Main Outcomes and Measures: The primary outcome in the ALLHAT-LLT was all-cause mortality. Secondary outcomes included cause-specific mortality and nonfatal myocardial infarction or fatal coronary heart disease combined (coronary heart disease events). Results: There were 1467 participants (mean [SD] age, 71.3 [5.2] years) in the pravastatin group (48.0% [n = 704] female) and 1400 participants (mean [SD] age, 71.2 [5.2] years) in the UC group (50.8% [n = 711] female). The baseline mean (SD) low-density lipoprotein cholesterol levels were 147.7 (19.8) mg/dL in the pravastatin group and 147.6 (19.4) mg/dL in the UC group; by year 6, the mean (SD) low-density lipoprotein cholesterol levels were 109.1 (35.4) mg/dL in the pravastatin group and 128.8 (27.5) mg/dL in the UC group. At year 6, of the participants assigned to pravastatin, 42 of 253 (16.6%) were not taking any statin; 71.0% in the UC group were not taking any statin. The hazard ratios for all-cause mortality in the pravastatin group vs the UC group were 1.18 (95% CI, 0.97-1.42; P = .09) for all adults 65 years and older, 1.08 (95% CI, 0.85-1.37; P = .55) for adults aged 65 to 74 years, and 1.34 (95% CI, 0.98-1.84; P = .07) for adults 75 years and older. Coronary heart disease event rates were not significantly different among the groups. In multivariable regression, the results remained nonsignificant, and there was no significant interaction between treatment group and age. Conclusions and Relevance: No benefit was found when pravastatin was given for primary prevention to older adults with moderate hyperlipidemia and hypertension, and a nonsignificant direction toward increased all-cause mortality with pravastatin was observed among adults 75 years and older. Trial Registration: clinicaltrials.gov Identifier: NCT00000542

Recommendation 1: ACP and AAFP recommend that clinicians initiate treatment in adults aged 60 years or older with systolic blood pressure persistently at or above 150 mm Hg to achieve a target systolic blood pressure of less than 150 mm Hg to reduce the risk for mortality, stroke, and cardiac events. (Grade: strong recommendation, high-quality evidence). ACP and AAFP recommend that clinicians select the treatment goals for adults aged 60 years or older based on a periodic discussion of the benefits and harms of specific blood pressure targets with the patient.

Recommendation 2: ACP and AAFP recommend that clinicians consider initiating or intensifying pharmacologic treatment in adults aged 60 years or older with a history of stroke or transient ischemic attack to achieve a target systolic blood pressure of less than 140 mm Hg to reduce the risk for recurrent stroke. (Grade: weak recommendation, moderate-quality evidence). ACP and AAFP recommend that clinicians select the treatment goals for adults aged 60 years or older based on a periodic discussion of the benefits and harms of specific blood pressure targets with the patient. Recommendation 3: ACP and AAFP recommend that clinicians consider initiating or intensifying pharmacologic treatment in some adults aged 60 years or older at high cardiovascular risk, based on individualized assessment, to achieve a target systolic blood pressure of less than 140 mm Hg to reduce the risk for stroke or cardiac events. (Grade: weak recommendation, low-quality evidence). ACP and AAFP recommend that clinicians select the treatment goals for adults aged 60 years or older based on a periodic discussion of the benefits and harms of specific blood pressure targets with the patient.


Description: This guideline updates the 2008 American College of Physicians (ACP) recommendations on treatment of low bone density and osteoporosis to prevent fractures in men and women. This guideline is endorsed by the American Academy of Family Physicians.

Methods: The ACP Clinical Guidelines Committee based these recommendations on a systematic review of randomized controlled trials; systematic reviews; large observational studies (for adverse events); and case reports (for rare events) that were published between 2 January 2005 and 3 June 2011. The review was updated to July 2016 by using a machine-learning method, and a limited update to October 2016 was done. Clinical outcomes evaluated were fractures and adverse events. This guideline focuses on the comparative benefits and risks of short- and long-term pharmacologic treatments for low bone density, including pharmaceutical prescriptions, calcium, vitamin D, and estrogen. Evidence was graded according to the GRADE (Grading of Recommendations Assessment, Development and Evaluation) system.

Target Audience and Patient Population: The target audience for this guideline includes all clinicians. The target patient population includes men and women with low bone density and osteoporosis.

Recommendation 1: ACP recommends that clinicians offer pharmacologic treatment with alendronate, risendronate, zoledronic acid, or denosumab to reduce the risk for hip and vertebral fractures in women who have known osteoporosis. (Grade: strong recommendation; high-quality evidence)

Recommendation 2: ACP recommends that clinicians treat osteoporotic women with pharmacologic therapy for 5 years. (Grade: weak recommendation; low-quality evidence)

Recommendation 3: ACP recommends that clinicians offer pharmacologic treatment with bisphosphonates to reduce the risk for vertebral fracture in men who have clinically recognized osteoporosis. (Grade: weak recommendation; low-quality evidence)

Recommendation 4: ACP recommends against bone density monitoring during the 5-year pharmacologic treatment period for osteoporosis in women. (Grade: weak recommendation; low-quality evidence)
Recommendation 5: ACP recommends against using menopausal estrogen therapy or menopausal estrogen plus progestogen therapy or raloxifene for the treatment of osteoporosis in women. (Grade: strong recommendation; moderate-quality evidence)

Recommendation 6: ACP recommends that clinicians should make the decision whether to treat osteopenic women 65 years of age or older who are at a high risk for fracture based on a discussion of patient preferences, fracture risk profile, and benefits, harms, and costs of medications. (Grade: weak recommendation; low-quality evidence)


Abstract: BACKGROUND: We hypothesised that vertebroplasty provides effective analgesia for patients with poorly controlled pain and osteoporotic spinal fractures of less than 6 weeks' duration. The effectiveness of vertebroplasty, using an adequate vertebral fill technique, in fractures of less than 6 weeks' duration has not been specifically assessed by previously published masked trials. METHODS: This was a multicentre, randomised, double-blind, placebo-controlled trial of vertebroplasty in four hospitals in Sydney, Australia. We recruited patients with one or two osteoporotic vertebral fractures of less than 6 weeks' duration and Numeric Rated Scale (NRS) back pain greater than or equal to 7 out of 10. We used an automated telephone randomisation service provided by the National Health and Medical Research Council to assign patients (1:1; stratified according to age, degree of vertebral compression, trauma, corticosteroid use, and hospital) to either vertebroplasty or placebo, immediately before the procedure. Patients received conscious sedation. Vertebroplasty was done with the adequate vertebral fill technique and the placebo procedure with simulated vertebroplasty. Follow-up was for 6 months. Outcome assessors and patients were masked to treatment allocation. The primary outcome was the proportion of patients with NRS pain below 4 out of 10 at 14 days post-intervention in the intention-to-treat population. This study is registered with ClinicalTrials.gov, number NCT01482793. FINDINGS: Between Nov 4, 2011, and Dec 5, 2014, 120 patients were enrolled. 61 patients were randomly assigned to vertebroplasty and 59 to placebo. 24 (44%) patients in the vertebroplasty group and 12 (21%) in the control group had an NRS pain score below 4 out of 10 at 14 days (between-group difference 23 percentage points, 95% CI 6-39; p=0.011). Three patients in each group died from causes judged unrelated to the procedure. There were two serious adverse events in each group, related to the procedure (vertebroplasty group) and the fracture (control group).

INTERPRETATION: Vertebroplasty is superior to placebo intervention for pain reduction in patients with acute osteoporotic spinal fractures of less than 6 weeks' in duration. These findings will allow patients with acute painful fractures to have an additional means of pain management that is known to be effective. FUNDING: Education grant from CareFusion Corporation


Abstract: Importance: In advanced dementia, goals of care decisions are challenging and medical care is often more intensive than desired. Objective: To test a goals of care (GOC) decision aid intervention to improve quality of communication and palliative care for nursing home residents with advanced dementia. Design, Setting, and Participants: A single-blind cluster randomized clinical trial, including 302 residents with advanced dementia and their family decision makers in 22 nursing homes. Interventions: A GOC video decision aid plus a structured discussion with nursing home health care providers; attention control with an informational video and usual care planning. Main Outcomes and Measures: Primary outcomes at 3 months were quality of communication (QOC, questionnaire scored 0-10 with higher ratings indicating better quality), family report of concordance with clinicians on the primary goal of care (endorsing same goal as the "best goal to guide care and medical treatment," and clinicians' "top priority for care and medical treatment"), and treatment consistent with preferences (Advance Care Planning Problem score). Secondary outcomes at 9 months were family ratings of symptom management and care, palliative care domains in care plans, Medical Orders for Scope of Treatment (MOST) completion, and hospital transfers. Resident-family dyads were the primary unit of analysis, and all analyses used intention-to-treat assignment. Results: Residents' mean age was 86.5 years, 39 (12.9%) were African American, and 246 (81.5%) were women. With the GOC intervention, family decision makers reported better quality of communication (QOC, 6.0 vs 5.6; P = .05) and better end-of-life communication (QOC end-of-life subscale, 3.7 vs 3.0; P = .02). Goal concordance did not differ at 3 months, but family decision makers with the
intervention reported greater concordance by 9 months or death (133 [88.4%] vs 108 [71.2%], P = .001). Family ratings of treatment consistent with preferences, symptom management, and quality of care did not differ. Residents in the intervention group had more palliative care content in treatment plans (5.6 vs 4.7, P = .02), MOST order sets (35% vs 16%, P = .05), and half as many hospital transfers (0.078 vs 0.163 per 90 person-days; RR, 0.47; 95% CI, 0.26-0.88). Survival at 9 months was unaffected (adjusted hazard ratio [aHR], 0.76; 95% CI, 0.54-1.08; P = .13).

**Conclusions and Relevance:** The GOC decision aid intervention is effective to improve end-of-life communication for nursing home residents with advanced dementia and enhance palliative care plans while reducing hospital transfers. Trial Registration: clinicaltrials.gov Identifier: NCT01565642


Abstract: **Background** Screening for depression in older adults is recommended. **Aims** To evaluate the diagnostic accuracy of the Two-Question Screen for older adults and compare it with other screening instruments for depression. **Method** We undertook a literature search for studies assessing the diagnostic performance of depression screening instruments in older adults. Combined diagnostic accuracy including sensitivity and specificity were the primary outcomes. Potential risks of bias and the quality of studies were also assessed. **Results** A total of 46 651 participants from 133 studies were identified evaluating 16 screening instruments. The majority of studies (64/133) used various versions of the Geriatric Depression Scale (GDS) and 6 used the Two-Question Screen. The combined sensitivity and specificity for the Two-Question Screen were 91.8% (95% CI 85.2-95.6) and 67.7% (95% CI 58.1-76.0), respectively; the diagnostic performance area under the curve (AUC) was 90%. The Two-Question Screen showed comparable performance with other instruments, including clinician-rated scales. The One-Question Screen showed the lowest diagnostic performance with an AUC of 78%. In subgroup analysis, the Two-Question Screen also had good diagnostic performance in screening for major depressive disorder. **Conclusions** The Two-Question Screen is a simple and short instrument for depression screening. Its diagnostic performance is comparable with other instruments and, therefore, it would be favourable to use it for older adult screening programmes.


Abstract: **Importance:** The US Preventive Services Task Force recommends annual lung cancer screening (LCS) with low-dose computed tomography for current and former heavy smokers aged 55 to 80 years. There is little published experience regarding implementing this recommendation in clinical practice. **Objectives:** To describe organizational- and patient-level experiences with implementing an LCS program in selected Veterans Health Administration (VHA) hospitals and to estimate the number of VHA patients who may be candidates for LCS. **Design, Setting, and Participants:** This clinical demonstration project was conducted at 8 academic VHA hospitals among 93033 primary care patients who were assessed on screening criteria; 2106 patients underwent LCS between July 1, 2013, and June 30, 2015. **Interventions:** Implementation Guide and support, full-time LCS coordinators, electronic tools, tracking database, patient education materials, and radiologic and nodule follow-up guidelines. **Main Outcomes and Measures:** Description of implementation processes; percentages of patients who agreed to undergo LCS, had positive findings on results of low-dose computed tomographic scans (nodules to be tracked or suspicious findings), were found to have lung cancer, or had incidental findings; and estimated number of VHA patients who met the criteria for LCS. **Results:** Of the 4246 patients who met the criteria for LCS, 2452 (57.7%) agreed to undergo screening and 2106 (2028 men and 78 women; mean [SD] age, 64.9 [5.1] years) underwent LCS. Wide variation in processes and patient experiences occurred among the 8 sites. Of the 2106 patients screened, 1257 (59.7%) had nodules; 1184 of these patients (56.2%) required tracking, 42 (2.0%) required further evaluation but the findings were not cancer, and 31 (1.5%) had lung cancer. A variety of incidental findings, such as emphysema, other pulmonary abnormalities, and coronary artery calcification, were noted on the scans of 857 patients (40.7%).
Conclusions and Relevance: It is estimated that nearly 900000 of a population of 6.7 million VHA patients met the criteria for LCS. Implementation of LCS in the VHA will likely lead to large numbers of patients eligible for LCS and will require substantial clinical effort for both patients and staff.


Abstract: BACKGROUND: Improved influenza vaccines are needed to control seasonal epidemics. This trial compared the protective efficacy in older adults of a quadrivalent, recombinant influenza vaccine (RIV4) with a standard-dose, egg-grown, quadrivalent, inactivated influenza vaccine (IIV4) during the A/H3N2-predominant 2014-2015 influenza season, when antigenic mismatch between circulating and vaccine influenza strains resulted in the reduced effectiveness of many licensed vaccines.

METHODS: We conducted a randomized, double-blind, multicenter trial of RIV4 (45 fEg of recombinant hemagglutinin [HA] per strain, 180 fEg of protein per dose) versus standard-dose IIV4 (15 fEg of HA per strain, 60 fEg of protein per dose) to compare the relative vaccine efficacy against reverse-transcriptase polymerase-chain-reaction (RT-PCR) confirmed, protocol-defined, influenza-like illness caused by any influenza strain starting 14 days or more after vaccination in adults who were 50 years of age or older. The diagnosis of influenza infection was confirmed by means of RT-PCR assay and culture of nasopharyngeal swabs obtained from participants with symptoms of an influenza-like illness. The primary end point was RT-PCR confirmed, protocol defined, influenza-like illness between 14 days or more after vaccination and the end of the influenza season.

RESULTS: A total of 9003 participants were enrolled and underwent randomization; 8855 (98.4%) received a trial vaccine and underwent an efficacy follow-up (the modified intention-to-treat population), and 8604 (95.6%) completed the per-protocol follow-up (the modified per-protocol population). Among RIV4 recipients, the RT-PCR confirmed influenza attack rate was 2.2% (96 cases among 4303 participants) in the modified per-protocol population and 2.2% (96 cases among 4427 participants) in the modified intention-to-treat population. Among IIV4 recipients, the attack rate was 3.2% (138 cases among 4301 participants) in the modified per-protocol population and 3.1% (138 cases among 4428 participants) in the modified intention-to-treat population. A total of 181 cases of influenza A/H3N2, 47 cases of influenza B, and 6 cases of nonsubtypeable influenza A were detected. The probability of influenza-like illness was 30% lower with RIV4 than with IIV4 (95% confidence interval, 10 to 47; P = 0.006) and satisfied prespecified criteria for the primary noninferiority analysis and an exploratory superiority analysis of RIV4 over IIV4. The safety profiles of the vaccines were similar.

CONCLUSIONS: RIV4 provided better protection than standard-dose IIV4 against confirmed influenza-like illness among older adults. (Funded by Protein Sciences; ClinicalTrials.gov number, NCT02285998.)


Abstract: Importance: Forgetfulness is a major contributor to nonadherence to chronic disease medications and could be addressed with medication reminder devices. Objective: To compare the effect of 3 low-cost reminder devices on medication adherence. Design, Setting, and Participants: This 4-arm, block-randomized clinical trial involved 53480 enrollees of CVS Caremark, a pharmacy benefit manager, across the United States. Eligible participants were aged 18 to 64 years and taking 1 to 3 oral medications for long-term use. Participants had to be suboptimally adherent to all of their prescribed therapies (with a medication possession ratio of 30% to 80%) in the 12 months before randomization. Participants were stratified on the basis of the medications they were using at randomization: medications for cardiovascular or other nondepression chronic conditions (the chronic disease stratum) and antidepressants (the antidepressant stratum). In each stratum, randomization occurred within blocks defined by whether all of the patient's targeted medications were dosed once daily. Patients were randomized to receive in the mail a pill bottle strip with toggles, digital timer cap, or standard pillbox. The control group received neither notification nor a device. Data were collected from February 12, 2013, through March 21, 2015, and data analyses were on the intention-to-treat population. Main Outcomes and Measures: The primary outcome was optimal adherence (medication possession ratio >/=80%) to all eligible medications among patients in the chronic disease stratum during 12 months of follow-up, ascertained using pharmacy claims data. Secondary outcomes included optimal adherence to cardiovascular medications among patients in the chronic disease stratum as well as optimal adherence to antidepressants. Results: Of the 53480 participants, mean (SD)
age was 45 (12) years and 56% were female. In the primary analysis, 15.5% of patients in the chronic disease stratum assigned to the standard pillbox, 15.1% assigned to the digital timer cap, 16.3% assigned to the pill bottle strip with toggles, and 15.1% assigned to the control arm were optimally adherent to their prescribed treatments during follow-up. There was no statistically significant difference in the odds of optimal adherence between the control and any of the devices (standard pillbox: odds ratio [OR], 1.03 [95% CI, 0.95-1.13]; digital timer cap: OR, 1.00 [95% CI, 0.92-1.09]; and pill bottle strip with toggles: OR, 0.94 [95% CI, 0.85-1.04]). In direct comparisons, the odds of optimal adherence were higher with a standard pillbox than with the pill bottle strip (OR, 1.10 [95% CI, 1.00-1.21]). Secondary analyses yielded similar results. Conclusions and Relevance: Low-cost reminder devices did not improve adherence among nonadherent patients who were taking up to 3 medications to treat common chronic conditions. The devices may have been more effective if coupled with interventions to ensure consistent use or if targeted to individuals with an even higher risk of nonadherence. Trial Registration: clinicaltrials.gov. Identifier: NCT02015806


Abstract: Importance: Bacteriuria plus pyuria is highly prevalent among older women living in nursing homes. Cranberry capsules are an understudied, nonantimicrobial prevention strategy used in this population. Objective: To test the effect of 2 oral cranberry capsules once a day on presence of bacteriuria plus pyuria among women residing in nursing homes. Design, Setting, and Participants: Double-blind, randomized, placebo-controlled efficacy trial with stratification by nursing home and involving 185 English-speaking women aged 65 years or older, with or without bacteriuria plus pyuria at baseline, residing in 21 nursing homes located within 50 miles (80 km) of New Haven, Connecticut (August 24, 2012-October 26, 2015). Interventions: Two oral cranberry capsules, each capsule containing 36 mg of the active ingredient proanthocyanidin (ie, 72 mg total, equivalent to 20 ounces of cranberry juice) vs placebo administered once a day in 92 treatment and 93 control group participants. Main Outcomes and Measures: Presence of bacteriuria (ie, at least 105 colony-forming units [CFUs] per milliliter of 1 or 2 microorganisms in urine culture) plus pyuria (ie, any number of white blood cells on urinalysis) assessed every 2 months over the 1-year study surveillance; any positive finding was considered to meet the primary outcome. Secondary outcomes were symptomatic urinary tract infection (UTI), all-cause death, all-cause hospitalization, all multidrug antibiotic-resistant organisms, antibiotics administered for suspected UTI, and total antimicrobial administration. Results: Of the 185 randomized study participants (mean age, 86.4 years [SD, 8.2], 90.3% white, 31.4% with bacteriuria plus pyuria at baseline), 147 completed the study. Overall adherence was 80.1%. Unadjusted results showed the presence of bacteriuria plus pyuria in 25.5% (95% CI, 18.6%-33.9%) of the treatment group and in 29.5% (95% CI, 22.2%-37.9%) of the control group. The adjusted generalized estimating equations model that accounted for missing data and covariates showed no significant difference in the presence of bacteriuria plus pyuria between the treatment group vs the control group (29.1% vs 29.0%; OR, 1.01; 95% CI, 0.61-1.66; P = .98). There were no significant differences in number of symptomatic UTIs (10 episodes in the treatment group vs 12 in the control group), rates of death (17 vs 16 deaths; 20.4 vs 19.1 deaths/100 person-years; rate ratio [RR], 1.07; 95% CI, 0.54-2.12), hospitalization (33 vs 50 admissions; 39.7 vs 59.6 hospitalizations/100 person-years; RR, 0.67; 95% CI, 0.32-1.40), bacteriuria associated with multidrug-resistant gram-negative bacilli (9 vs 24 episodes; 10.8 vs 28.6 episodes/100 person-years; RR, 0.38; 95% CI, 0.10-1.46), antibiotics administered for suspected UTIs (692 vs 909 antibiotic days; 8.3 vs 10.8 antibiotic days/person-year; RR, 0.77; 95% CI, 0.44-1.33), or total antimicrobial utilization (1415 vs 1883 antimicrobial days; 17.0 vs 22.4 antimicrobial days/person-year; RR, 0.76; 95% CI, 0.46-1.25). Conclusions and Relevance: Among older women residing in nursing homes, administration of cranberry capsules vs placebo resulted in no significant difference in presence of bacteriuria plus pyuria over 1 year. Trial Registration: clinicaltrials.gov. Identifier: NCT01691430


Abstract: Background: The clinical and financial burden from bladder infections is significant. Daily antibiotic use is the recommended strategy for recurrent urinary tract infection prevention. Increasing antibiotic resistance rates, however, require immediate identification of innovative alternative prophylactic therapies. This systematic review aims to provide guidance on gaps in evidence to guide future research. Objective: The objective of this
Among 140 randomized patients (mean age, 58 [SD, 8] years, 75 women [54%]), 119 (85%) completed the study. Mixed-effects regression models with a random intercept were used to analyze the longitudinal repeated outcome measures. Patients fulfilling the American College of Rheumatology criteria for symptomatic knee osteoarthritis, Kellgren-Lawrence grades 2 or 3, were enrolled at Tufts Medical Center beginning February 11, 2013; all patients completed the study by January 1, 2015. Interventions: Intra-articular triamcinolone (n = 70) or saline (n = 70) every 12 weeks for 2 years. Main Outcomes and Measures: Annual knee magnetic resonance imaging for quantitative evaluation of cartilage volume (minimal clinically important difference not yet defined), and Western Ontario and McMaster Universities Osteoarthritis index collected every 3 months (Likert pain subscale range, 0 [no pain] to 20 [extreme pain]; minimal clinically important improvement, 3.94). Results: Among 140 randomized patients (mean age, 58 [SD, 8] years, 75 women [54%]), 119 (85%) completed the study. Intra-articular triamcinolone resulted in significantly greater cartilage volume loss than did saline for a mean change in index compartment cartilage thickness of -0.21 mm vs -0.10 mm (between-group difference, -0.11 mm; 95% CI, -0.20 to -0.03 mm); and no significant difference in pain (-1.2 vs -1.9; between-group difference, -0.6; 95% CI, -1.6 to 0.3). The saline group had 3 treatment-related adverse events compared with 5 in the triamcinolone group and had a small increase in hemoglobin A1c levels (between-group difference, -0.2%; 95% CI, -0.5% to -0.007%). Conclusions and Relevance: Among patients with symptomatic knee osteoarthritis, 2 years of intra-articular triamcinolone, compared with intra-articular saline, resulted in significantly greater cartilage volume loss and no significant difference in knee pain. These findings do not support this treatment for patients with symptomatic knee osteoarthritis. Trial Registration: ClinicalTrials.gov Identifier: NCT01230424
METHODS: This study was carried out on 200 patients, aged 40 years or older, attending the outpatient clinic of the Rheumatology Department of Sohag University Hospital with unilateral knee effusion related to OA based on clinical examination, musculoskeletal ultrasonography (US), and synovial fluid analysis. In group 1, 50 patients received spironolactone 25 mg daily for 2 weeks; in group 2, 50 patients took ibuprofen 1200 mg daily for 2 weeks; in group 3, 50 patients used cold compresses 2 times daily for 2 weeks; and in group 4, 50 patients received placebo for the same duration. Fluid > 4 mm was considered as effusion. Decrease in fluid to reach below 4-mm thickness was considered complete improvement, and any decrease that did not reach below 4 mm thickness was considered partial improvement.

RESULTS: The mean age of the participants was 51.2 +/- 8.1 years. The mean duration of effusion was 16.5 +/- 3.6 days. In group 1, 66% had complete improvement, 20% partial improvement, and 14% no response. In group 2, 24% had complete improvement, 12% partial improvement, and 64% no response. In group 3, 28% had complete improvement, 14% partial improvement, and 58% no response. In group 4, only 6% had complete improvement, 10% partial improvement, and 84% no response.

CONCLUSION: Low-dose spironolactone is a safe and effective medical treatment for OA-related knee effusion.

OBJECTIVES: Osteoarthritis (OA) of the knee is one of the most common chronic diseases among older adults. This study aimed to test the effects of cabbage leaf wraps (CLWs) in the treatment of symptomatic OA.

METHODS: Patients with OA of the knee at stages II to III (Kellgren-Lawrence) were randomly assigned to 4 weeks of treatment with CLWs (daily for at least 2h), topical pain gel (TPG) (10 mg diclofenac/g, at least once daily), or usual care (UC). The primary outcome measure was pain intensity (VAS) after 4 weeks. Secondary outcomes included functional disability Western Ontario and McMaster Universities Arthritis Index (WOMAC), quality of life (SF-36), self-efficacy (Arthritis Self-Efficacy Scale-D), physical function (30 s Chair Stand Test), pressure pain sensitivity (PPT), satisfaction, and safety after 4 and 12 weeks.

RESULTS: In total, 81 patients were included in this study (42 women, 65.9+/10.3 y). After 4 weeks patients in the CLW group reported significantly less pain compared with those in the UC group (difference, -12.1; 95% confidence interval CI, -23.1, -1.0; P=0.033) but not when compared with the TPG group (difference, -8.6; 95% CI, -21.5, 4.4; P=0.190). Significant effects were also found in WOMAC, SF-36, 30-second Chair Stand Test, and PPT scores in the CLW group compared with the UC group. Compared with TPG, effects from CLW were found for WOMAC after 4 weeks and for quality of life after 12 weeks. Patients were satisfied with both active interventions, and except for 2 adverse events in both groups the applications were well tolerated.

CONCLUSIONS: CLWs are more effective for knee OA than UC, but not compared with diclofenac gel. Therefore, they might be recommended for patients with OA of the knee. Further research is warranted.

METHODS: We assigned 790 men 65 years of age or older with a serum testosterone concentration of less than 275 ng per deciliter and symptoms suggesting hypoandrogenism to receive either testosterone gel or placebo gel for 1 year. Each man participated in one or more of three trials—the Sexual Function Trial, the Physical Function Trial, and the Vitality Trial. The primary outcome of each of the individual trials was also evaluated in all participants.

RESULTS: Testosterone treatment increased serum testosterone levels to the mid-normal range for men 19 to 40 years of age. The increase in testosterone levels was associated with significantly increased sexual activity, as assessed by the Psychosexual Daily Questionnaire (P<0.001), as well as significantly increased sexual desire and erectile function. The percentage of men who had an increase of at least 50 m in the 6-minute walking distance...
did not differ significantly between the two study groups in the Physical Function Trial but did differ significantly when men in all three trials were included (20.5% of men who received testosterone vs. 12.6% of men who received placebo, P=0.003). Testosterone had no significant benefit with respect to vitality, as assessed by the Functional Assessment of Chronic Illness Therapy-Fatigue scale, but men who received testosterone reported slightly better mood and lower severity of depressive symptoms than those who received placebo. The rates of adverse events were similar in the two groups.

**CONCLUSIONS:** In symptomatic men 65 years of age or older, raising testosterone concentrations for 1 year from moderately low to the mid-normal range for men 19 to 40 years of age had a moderate benefit with respect to sexual function and some benefit with respect to mood and depressive symptoms but no benefit with respect to vitality or walking distance. The number of participants was too few to draw conclusions about the risks of testosterone treatment. (Funded by the National Institutes of Health and others; ClinicalTrials.gov number, NCT00799617.)