11-23-19

1. Optimism Is a Powerful Factor in Exceptional Longevity

2. Fracture Risk and Physical Activity in Postmenopausal Women

Severe vs. Moderate Energy Restriction in Obese Postmenopausal Women

3. Women and Heart Failure: Heart Drugs and Dosages

4. What Is the Optimal Cholesterol Level After Stroke or TIA?

Suicide Among Young People Climbs 56% in 10 Years

5. How Common Is Recent Sex Without Contraceptives Among Pediatric Emergency Department Patients?

Early Formula Use Tied to Cow's Milk Sensitization and Food Allergies

6. Kangaroo Care Improves Survival in Low-Birth-Weight Infants

7. Shorter Penicillin Treatment for Strep Throat Is Effective

The Era of App-Detected Atrial Fibrillation Is Coming, but Evaluations Are Ongoing

8. Postpartum Opioid Use: Can We Reduce It Safely?

9. Feasibility of Do-It-Yourself Urinary Catheter Removal After Pelvic Reconstructive Surgery

Proc Natl Acad Sci U S A 2019 Sep 10; 116:18357

Optimism Is a Powerful Factor in Exceptional Longevity

In an observational study, optimism was associated significantly with attaining age 85.

Many genetic, sociodemographic, and lifestyle factors influence longevity. To answer the question of whether an optimistic attitude also affects longevity, investigators studied more than 70,000 participants in the Nurses' Health Study and the Veterans Affairs Normative Aging Study from whom detailed health, sociodemographic, and lifestyle data have been collected over several decades. Participants also completed validated instruments that measure optimism.

In both sexes, higher optimism levels correlated with increased longevity, with a dose–response relation, after adjustment for sociodemographic and lifestyle factors and coexisting health conditions. Study participants with the highest levels of optimism had 50% (for women) and 70% (for men) higher likelihood of surviving to age 85, compared with women and men with the lowest optimism levels.

COMMENT: Given the number of study participants, the meticulous detail with which the relevant data were prospectively collected, and the long duration of observation, these results appear to be robust: Optimism is associated independently with longevity, after adjustment for potentially confounding factors. The results raise the "chicken or the egg" question: Does good health breed optimism, or does optimism improve longevity? The authors favor the latter theory. But, if optimism *can* improve longevity, so what? The authors cite studies showing that brief interventions can enhance optimism, at least in the short term. That does not mean that such interventions will extend life, but the hypothesis is worth testing.

CITATION(S): Lee LO et al. Optimism is associated with exceptional longevity in 2 epidemiologic cohorts of men and women. *Proc Natl Acad Sci U S A* 2019 Sep 10; 116:18357. (https://doi.org/10.1073/pnas.1900712116)

****

JAMA Netw Open 2019 Oct 2; 2:e1914084

Fracture Risk and Physical Activity in Postmenopausal Women

Total fracture risk was lower in active women, but knees and arms were at higher risk with more activity.

The Women's Health Initiative (WHI) was a prospective cohort study of 77,206 postmenopausal women (mean age at enrollment, 63) who underwent baseline assessments for physical and sedentary activity. In this analysis of WHI data, researchers explored the association between physical activity and hip and total fracture risk; participants were followed for a mean of 14 years, during which 25,516 women (33%) reported fractures.

Compared with inactive women, age-adjusted total relative fracture risk was significantly lower (by 6%–8%) among women with any level of physical activity. Multivariable-adjusted hip fracture relative risk was 18% lower among women with the highest level of physical activity (>17.7 metabolic equivalent hours/week, equivalent to walking 2–3 mph for ≈6 hours/week) than among inactive women; however, risk for knee fracture was 26% higher, and age-adjusted risk for arm or forearm fracture was 7% higher among women with the highest level of physical activity. Age-adjusted total fracture risk was 4% lower in women who reported the highest levels of yard work (non-recreational activity) but was 10% higher in women who reported >9.5 hours (vs. <6.5 hours) of sedentary activity daily.

COMMENT: These details of higher or lower risk for various types of fractures do not change the overall conclusion that more physical activity generally is beneficial for postmenopausal women. However, these details do help clinicians counsel patients about potential risk associated with increasing physical activity.

CITATION(S): LaMonte MJ et al. Association of physical activity and fracture risk among postmenopausal women. *JAMA Netw Open* 2019 Oct 2; 2:e1914084. (https://doi.org/10.1001/jamanetworkopen.2019.14084)

****

JAMA Netw Open 2019 Oct 30; 2:e1913733.

Severe vs. Moderate Energy Restriction in Obese Postmenopausal Women

Severe caloric restriction led to more weight loss but also more bone loss.

Severe energy restriction (<800 kcal/day) is effective for weight loss, but known side effects (e.g., hair loss, fatigue) have limited its use. In this trial, 100 obese postmenopausal Australian women (mean age, 58; mean body-mass index, 34 kg/m^2) without osteoporosis were randomized to receive either a severe or a moderate energy–restricted diet. The moderate diet cut energy intake by 25% to 35% relative to estimated energy expenditure using a healthy food–based plan.

The severe diet cut energy intake by 65% to 75% relative to estimated expenditure for the first 4 months using commercial meal-replacement products, then relaxed to a moderate diet plan for the remaining 8 months of the study.

At 12 months, the severe-diet group, compared with the moderate-diet group, had lost more weight (mean, 15.3 kg vs. 8.4 kg) and more lean body mass (1.2 kg vs. 0.4 kg). Hip bone-mineral density (BMD) declined more in the severe-diet group than in the moderate-diet group, resulting in a higher prevalence of osteopenia (39% vs. 29%). More participants in the severe-diet group completed the trial (92% vs. 77%); no severe side effects were reported.

COMMENT: Interestingly, adherence was greater in the severe-diet group than in the moderate-diet group, perhaps because of the structured meal replacement protocol. Lean body-mass loss was greater in the severe-diet group but was proportionate to overall weight loss. The clinical importance of decreased BMD associated with severe energy-restricted diets is unclear.

CITATION(S): Seimon RV et al. Effect of weight loss via severe vs moderate energy restriction on lean mass and body composition among postmenopausal women with obesity: The TEMPO diet randomized clinical trial. *JAMA Netw Open* 2019 Oct 30; 2:e1913733. (https://doi.org/10.1001/jamanetworkopen.2019.13733)

****

Lancet 2019 Oct 5; 394:1254

Women and Heart Failure: Heart Drugs and Dosages

Observational data suggest that women might have better outcomes with drug doses lower than those for men.

Several studies have documented higher plasma drug concentrations with the same medication doses in women than in men, but guideline-recommended doses of cardiovascular medications are the same regardless of sex. To understand whether certain medications should be dosed differently for men and women, investigators studied angiotensin-converting–enzyme (ACE) inhibitors, angiotensin-receptor blockers (ARBs), and β-blockers in patients with heart failure with reduced ejection fraction (HFrEF).

The investigators performed a post hoc analysis of BIOSTAT-CHF, a prospective study of 2516 patients with worsening signs or symptoms of HF who were considered to be receiving suboptimal medical treatment. Patients who died within the first 3 months were excluded.

Women were older than men (74 vs. 70), weighed less (72 vs. 85 kg), and were shorter (162 vs. 174 cm) but did not have significantly different body-mass index from men. In men, the lowest risk for death or hospitalization for HF occurred at the full recommended dose of ACE inhibitors or ARBs and β-blockers. For women, however, the lowest risk for death or HF hospitalization occurred at only 50% of the recommended doses, and the risks did not further decrease at higher doses, even after adjustment for covariates. To validate these findings, the investigators analyzed data from ASIAN-HF, a study of 4500 patients with HFrEF. Similar patterns were observed. The authors noted that women suffered more and more-severe adverse effects than men at the full medication doses.

COMMENT: These findings suggest that women with HFrEF may experience similar benefits as men and fewer adverse effects at lower doses of ACE inhibitors or ARBs and β-blockers. Of course, these observational data are potentially confounded, and the post hoc analysis cannot prove the optimal doses for women. Nevertheless, the data support sex-specific studies to analyze optimal drug doses.

CITATION(S): Santema BT et al. Identifying optimal doses of heart failure medications in men compared with women: A prospective, observational, cohort study. *Lancet* 2019 Oct 5; 394:1254. (https://doi.org/10.1016/S0140-6736(19)31792-1)

****

N Engl J Med 2019 Nov 18

What Is the Optimal Cholesterol Level After Stroke or TIA?

A randomized trial of two LDL targets suggests that the lower target is better.

Use of statins after ischemic stroke or transient ischemic attack (TIA) has been recommended in guidelines for more than a decade. However, some epidemiologic studies (*Stroke* 2013; 44:1833) have raised the issue of whether excessive LDL cholesterol lowering increases the risk for brain hemorrhage. The standard treatment of 80 mg atorvastatin comes from a single randomized trial (SPARCL; *N Engl J Med* 2006; 355:549). Moreover, no randomized trial has compared different LDL targets following stroke.

These investigators enrolled 2860 patients (mean age, 67; 68% male), 86% with a recent ischemic stroke (within 3 months) and 14% with a TIA (within 15 days). Participants were randomized to a lower target of LDL (<70 mg/dL) or a higher target of LDL (90–110 mg/dL). Stroke patients were enrolled an average of 6 days after the event. All patients had to have cerebral atherosclerotic disease, aortic plaques, or coronary artery disease. Local physicians could prescribe any statin with or without ezetimibe. The composite primary endpoint was stroke, myocardial infarction, symptoms leading to coronary or carotid revascularization, or cardiovascular death.

Mean participant baseline LDL was 135 mg/dL. Mean achieved LDL levels were 65 mg/dL in the lower-target group and 96 mg/dL in the higher-target group. Most patients received moderate-intensity statin therapy. At 2 years, the lower-target group had greater use of high-intensity statins (23% vs. 8%) and more-frequent use of ezetimibe (37% vs. 6%). The trial was stopped prematurely for administrative reasons. During a median follow-up of 3.5 years, the primary endpoint occurred in 8.5% of the lower-target group and 10.9% of the higher-target group (adjusted hazard ratio, 0.78; *P*=0.04). Rates of intracranial hemorrhage or newly diagnosed diabetes did not differ between the two groups.

COMMENT: This study supports the use of intensive medical therapy for patients with a recent stroke or TIA. Although the premature termination of the trial reduced its statistical power, the results are consistent with meta-analyses of previous cholesterol treatment trials. Therefore, following ischemic stroke or TIA, an LDL target of <70 mg/dL should be the goal.

CITATION(S): Amarenco P et al. A comparison of two LDL cholesterol targets after ischemic stroke. *N Engl J Med* 2019 Nov 18; [e-pub]. (https://doi.org/10.1056/NEJMoa1910355)

****

Suicide Among Young People Climbs 56% in 10 Years

By Kelly Young *Edited by: William E. Chavey, MD, MS*

The suicide rate for people aged 10 to 24 increased from 6.8 to 10.6 per 100,000 from 2007 to 2017, according to new data from the CDC's National Center for Health Statistics.

Among the other findings:

- The rate of suicide surpassed that of homicide for young people. However, homicide rates increased 18% from 2014 through 2017, following a period of decline.
- In 2017, suicide was the second leading cause of death for those aged 10–24. Homicide ranked third for those aged 15–24 and fifth for those aged 10–14.

- Among the youngest age group, those aged 10–14, the suicide rate nearly tripled from 2007 to 2017, from 0.9 to 2.5 per 100,000.

LINK(S): NCHS data brief (Free)

****

Acad Emerg Med 2019 Oct 9

How Common Is Recent Sex Without Contraceptives Among Pediatric Emergency Department Patients?

Approximately one in six adolescents seen in U.S. pediatric emergency departments reported having had sex without contraceptives.

Sexually transmitted infections and teen pregnancy are common in the U.S., but the prevalence of adolescent emergency department patients who engage in sex without contraceptives has been unknown and could have implications for screening practices.

These authors performed a secondary analysis of data prospectively collected from medically and behaviorally stable patients aged 14–17 who completed a survey on a tablet, in private, in 16 pediatric EDs in the U.S., answering questions about substance use and other risky behaviors. This study included the 3247 patients who answered the question, "How many times in the past 12 months have you had sex without contraceptives?" Overall, 16.5% of these patients reported engaging in sex without contraceptives during the past year. The odds of having sex without contraceptives were higher in patients who were black, participated in casual sex, and reported binge drinking or marijuana use.

COMMENT; Nearly one in six adolescent patients in these urban U.S. EDs had had sex without contraceptives in the past year. This proportion was even higher in 17-year-old patients: One in three males and one in four females reported such behavior. Yet, given that the survey question combined both barrier and nonbarrier contraception, these numbers almost certainly underestimate the proportion of adolescents who engage in unprotected sex and are thus at risk for sexually transmitted infections. As emergency departments serve increasingly as access points to care for medical, behavioral, and social issues, risky sexual behavior may represent an important area for screening and intervention in adolescents.

Note to readers: At the time we reviewed this paper, its publisher noted that it was not in final form and that subsequent changes might be made.

CITATION(S): Chernick LS et al. Sex without contraceptives in a multi-center study of adolescent emergency department patients. *Acad Emerg Med* 2019 Oct 9; [e-pub]. (https://doi.org/10.1111/ACEM.13867)

****

JAMA Pediatr 2019 Oct 21

Early Formula Use Tied to Cow's Milk Sensitization and Food Allergies

Newborns at risk for atopy given elemental instead of cow's milk formula as an early supplement to breastfeeding had lower occurrence of cow's milk protein sensitization and food allergies at 2 years.

Cow's milk formula is commonly fed to newborns, but whether such use plays a role in sensitization to cow's milk protein and the development of food allergies is unclear. Researchers in Japan randomized 312 newborns at risk for atopy (parent or sibling with atopic disease) to breast-feeding supplemented with either elemental formula (EF) or cow's milk formula

(CMF) for at least the first 3 days of life. The primary outcome was sensitization to cow's milk protein (IgE level ≥0.35 U_A/mL); secondary outcomes were prevalence and cumulative incidence of immediate-type and anaphylactic-type food allergies (after oral food challenge or reported to follow-up physician). All outcomes were assessed at 2 years of age.

Sensitization to cow's milk protein was less frequent in the EF group than in the CMF group (17% vs. 32%; relative risk, 0.52). Food allergies were also less common in the EF group, with lower cumulative incidence of allergy to cow's milk (RR, 0.10), egg (RR, 0.57), and wheat (RR, 0.14) as well as immediate-type (RR, 0.49) and anaphylactic-type (RR, 0.08) reactions to any food. The prevalence of each allergy type was also significantly lower in the EF group.

COMMENT: Although the epidemiology of food allergies among children can vary between countries, these findings from a Japanese hospital nonetheless offer a compelling angle on early feeding. When advising parents expecting a newborn at risk for atopy, clinicians can use these findings to reinforce the importance of breast-feeding, as well as to recommend that any formula offered in the first days of life be an elemental formula.

CITATION(S): Urashima M et al. Primary prevention of cow's milk sensitization and food allergy by avoiding supplementation with cow's milk formula at birth: A randomized clinical trial. *JAMA Pediatr* 2019 Oct 21; [e-pub]. (https://doi.org/10.1001/jamapediatrics.2019.3544)

****

Lancet 2019 Oct 4

Kangaroo Care Improves Survival in Low-Birth-Weight Infants

A large intervention trial in India shows lower neonatal mortality and better growth outcomes at 28 days.

Although kangaroo care (skin-to-skin contact between a parent and infant) has been shown to be beneficial for neonates, it is not universally implemented. In a randomized, controlled study in India, researchers compared neonatal (28-day) mortality among 8402 babies with birth weights between 1500 and 2250 g who received either daily kangaroo care with exclusive breast-feedings or routine neonatal care.

Both groups had multiple home visits during the early days and weeks of life. Nineteen percent of babies were born at home and 81% were born in a hospital. Infants in the kangaroo care group had skin-to-skin contact for an average of 11 hours daily. Kangaroo care began within 72 hours of birth (median age, 30 hours). Results at age 28 days were as follows:

- Mortality was significantly lower among infants receiving the kangaroo care intervention, both overall (1.6% vs. 2.3%; hazard ratio, 0.7) and across birth-weight subgroups.
- Survival increased with increased duration of daily skin-to-skin contact.
- Exclusive breast-feeding was significantly more common in the kangaroo intervention group (at 1, 3, and 6 months).
- Weight for age and weight for length were greater and frequency of severe wasting was lower with kangaroo care.
- The incidence of serious bacterial infections and diarrhea were lower in the kangaroo intervention group, although the number of hospitalizations did not differ.

COMMENT: This study shows important benefits of kangaroo care in low-birth-weight babies, a strategy that could improve global neonatal outcomes. It is increasingly being utilized worldwide and should be encouraged in developed as well as developing countries.

CITATION(S): Mazumder S et al. Effect of community-initiated kangaroo mother care on survival of infants with low birthweight: A randomised controlled trial. *Lancet* 2019 Oct 4; [e-pub]. (https://doi.org/10.1016/S0140-6736(19)32223-8)

Charpak N and Ruiz-Pelaez JG. Improving survival of infants with low birthweight cared for outside hospitals. *Lancet* 2019 Oct 4; [e-pub]. (https://doi.org/10.1016/S0140-6736(19)32257-3)

****

BMJ 2019 Oct 4; 367:l5337

Shorter Penicillin Treatment for Strep Throat Is Effective

More-frequent, higher penicillin dosing for 5 days was noninferior to a standard 10-day course for eradication and complications.

For many decades, a 10-day course of oral penicillin was recommended for the cure of pharyngitis and pharyngotonsillitis caused by group A streptococcus. Several recent studies suggest that shorter courses can effectively treat these conditions.

In a randomized, open-label, controlled study, investigators compared the European standard regimen of 1000 mg penicillin V three times daily for 10 days with a course of 800 mg four times daily for 5 days. Enrollment required having at least three of four Centor clinical criteria plus a positive rapid streptococcal test. The primary outcome was noninferiority in clearing clinical infection at 5 to 7 days after antibiotic treatment; secondary outcomes were relapse and complications.

In the per-protocol analysis of 397 patients, clinical cure occurred in 89.6% in the 5-day group versus 93.3% in the 10-day group. Bacteriologic clearance was 80.4% and 90.7%, respectively. In the 5- and 10-day groups respectively, 8 and 7 patients had relapses with 1 month, no patients and 4 had minor complications within 3 months, and 6 and 13 had new tonsillitis within 3 months. These data indicated noninferiority of the shorter course.

COMMENT: Data to inform appropriate duration of therapy is sorely lacking for almost any infection syndrome. A rare exception has been the recommendation for a 10-day penicillin course for streptococcal pharyngitis summarized in the American Heart Association guidelines (*Circulation* 2009; 119:1541) and based on studies on naval recruits (Rammelkamp CH et al. Studies on the epidemiology of rheumatic fever in the armed services. In: Thomas L, ed. *Rheumatic Fever*. University of Minnesota Press; 1952) showing that shorter courses did not prevent one of the two major postinfectious complications, rheumatic fever (the other being glomerulonephritis). In developed countries, rheumatic fever is vanishingly rare because of the mysterious disappearance of rheumatogenic strains of streptococci, opening the door to considering shorter penicillin courses, which may be the better option in these locales. Accordingly, this regimen should not be applied in areas where rheumatic disease persists. One caveat: Diagnosis and treatment of "streptococcal pharyngitis" should never be made on notoriously inaccurate clinical criteria alone. Culture or rapid strep testing should always be performed.

CITATION(S): Skoog Ståhlgren G et al. Penicillin V four times daily for five days versus three times daily for 10 days in patients with pharyngotonsillitis caused by group A streptococci: Randomised controlled, open label, non-inferiority study. *BMJ* 2019 Oct 4; 367:l5337. (https://doi.org/10.1136/bmj.l5337)

****

N Engl J Med 2019 Nov 14; 381:1909

The Era of App-Detected Atrial Fibrillation Is Coming, but Evaluations Are Ongoing

The size and methods of this Apple Watch study are groundbreaking, but it raises more questions than it answers.

The Apple Watch has an optical sensor that can detect heart rates, thus introducing the possibility of detecting atrial fibrillation (AF). The industry-sponsored, prospective, open-label, siteless, pragmatic Apple Heart Study tested an algorithm to identify AF (NCT03335800). The 419,297 adult U.S. participants enrolled via an app, owned Apple Watches and iPhones, and had no prior AF.

During the study, 2161 people were notified of an irregular pulse, of whom 79% were excluded for various reasons, including 1216 who failed to attend a telemedicine visit. The researchers urgently contacted 20 people: 18 with AF and a rate >200 beats/minute, 1 with a pause >6 seconds, and 1 with nonsustained ventricular tachycardia >6 seconds.

For confirmation, electrocardiographic patches were mailed to 658 participants with nonurgent symptoms. Participants began wearing the patches about 13 days after the notification, for about 6 days. Of 450 people who returned the patches, AF was confirmed in 153 (34%); 20% had continuous AF. The yield was higher in older than younger people. Of 293,015 participants who never received a notification and who returned an end-of-study survey, 3070 reported new AF diagnoses.

COMMENT: With a new algorithm and a later version of the Apple Watch, which allows for the recording of a real-time, single-lead ECG, the ability to track AF might have improved. Regardless, this study is groundbreaking because of its massive size and siteless method. However, as an assessment of this approach, the study has many limitations. Large percentages of patients were lost to follow-up. Also, the confirmation method's sensitivity is unknown — many patients might have had intermittent AF. Overall, the algorithm caught some AF episodes and missed others. As clinicians, we should not rely on the Apple Watch, but neither can we ignore these results. We certainly need more study about how to optimize such tools and, especially, how to best respond to brief, intermittent, subclinical AF episodes.

CITATION(S): Perez MV et al. Large-scale assessment of a smartwatch to identify atrial fibrillation. *N Engl J Med* 2019 Nov 14; 381:1909. (https://doi.org/10.1056/NEJMoa1901183)

Campion EW and Jarcho JA. Watched by Apple. *N Engl J Med* 2019 Nov 14; 381:1964. (https://doi.org/10.1056/NEJMe1913980)

****

Obstet Gynecol 2019 Nov; 134:932

Postpartum Opioid Use: Can We Reduce It Safely?

A newly developed pain scoring system may be effective for decreasing opioid use, but providers must be aware of potential downstream effects.

Delivery of an infant is the number one reason for hospital admission in the U.S., where most mothers recovering from a delivery (whether cesarean or vaginal) receive postpartum opioids. For many women, this encounter represents their initial introduction to opioids. Now, researchers have sought to reduce postpartum opioid use without an unacceptable increase in pain by creating a multimodal pain plan consisting of a three-tier treatment system (acetaminophen, oxycodone, and morphine or dilaudid) focused on therapeutic activity goals (e.g., ability to rest comfortably, ability to ambulate with minimal pain) as opposed to numerical pain scores. In cohorts of 6892 women (before implementation of the pain plan) and 7527 women (after implementation) delivering at one Texas hospital system, rates of opioid use as well as total opioid use (measured in morphine milligram equivalents [MME]) were compared.

In women assessed after implementation of the pain plan, rates of opioid use were lower by 26% for vaginal deliveries and by 18% for cesarean deliveries; overall MME decreased by 21% and 54%, respectively. However, fewer women reported that their pain was “acceptable at 24 hours” (82% preimplementation vs. 70% postimplementation) or “well controlled” (76% vs. 67%). In addition, among women with vaginal deliveries, the proportion who received >4 g of acetaminophen was higher after implementation.

COMMENT: In many countries, opioid medications are not routinely used postpartum. U.S. recommendations for opioid use include using the lowest possible dose of intermediate-release opioids for the shortest amount of time. Providers should utilize nonpharmacologic therapy and nonopioid therapy when possible. These authors demonstrated that better pain scoring systems and opioid prescribing protocols may help decrease the overall use of opioids. Our challenge as clinicians is to provide adequate postpartum pain control while averting opioid overuse and ensuring that our patients don't exceed safe acetaminophen thresholds.

Dr. Burnett is Assistant Professor of Maternal Fetal Medicine, Director of Ultrasound and Prenatal Diagnosis, and Associate Clerkship Director, Department of Obstetrics and Gynecology, University of Florida College of Medicine—Jacksonville.

CITATION(S): Rogers RG et al. Decreasing opioid use postpartum: A quality improvement initiative. *Obstet Gynecol* 2019 Nov; 134:932. (https://doi.org/10.1097/AOG.0000000000003512)

****

Obstet Gynecol 2019 Nov; 134:1027

Feasibility of Do-It-Yourself Urinary Catheter Removal After Pelvic Reconstructive Surgery

In a randomized trial, women who self-removed catheters had similar postoperative outcomes and greater satisfaction than women with in-office removal.

Urinary retention, common following pelvic reconstructive surgery, is typically managed with an indwelling catheter for several days as bladder function returns. To test the feasibility of women removing their own catheter at home, investigators randomized 158 women (mean age, 61; mean body-mass index, 28 kg/m^2) to return to the clinic at 7 days or to self-remove the catheter at home.

Prevalence of urinary retention following catheter removal was similar in both groups (14%), establishing noninferiority for self-removal. Urinary tract infections were common in both groups (>50%). Women who removed their own catheters were less likely to require an office visit but more likely to call the office; they also reported higher satisfaction with the catheter care procedure and willingness to use it again.

COMMENT: This innovative approach shows that many women are interested in (and capable of) becoming active participants in postsurgical care by removing their own urinary catheters at home. Provided with appropriate support by telephone, such study participants were more satisfied and had similar outcomes as those with in-office catheter removal. These findings mirror those showing that self-obtained versus provider-obtained vaginal swabs have similar efficacy for detecting sexually transmitted diseases — and are often preferred by women. As access to telemedicine grows, we're likely to see other trials of "do-it-yourself" procedures with remote support from providers.

CITATION(S): Shatkin-Margolis A et al. Self-removal of a urinary catheter after urogynecologic surgery: A randomized controlled trial. *Obstet Gynecol* 2019 Nov; 134:1027. (https://doi.org/10.1097/AOG.0000000000003531)

****