Perioperative Surgical Home Model of Care May Ease Recovery for Patients with Hip Fractures

Older adults who had emergency repair of a fractured hip were much less likely to die or make a return visit to the emergency department (ED) if they received care under the Perioperative Surgical Home (PSH) model of care, suggests research presented at the Anesthesiology® 2017 annual meeting. The PSH is a patient-centric, physician-led, team-based system of coordinated care that guides patients through the entire surgical experience, from the decision to undergo surgery to discharge and beyond.

The study compared outcomes of 222 patients with hip fractures treated prior to implementation of the PSH to 118 who were treated afterward. The study found that death rates for the PSH group were reduced by ≥50% (1.7% of non-PSH patients died compared to less than 1% of PSH patients); and PSH patients were less likely to visit the ED after discharge (9.5% of non-PSH patients compared to 5.1% of PSH patients visited the ED within 30 days after discharge; 23.4% of non-PSH patients compared to 14.4% of PSH patients visited the ED within 90 days of discharge). In addition, PSH patients were more likely to be discharged to their homes instead of a nursing home or other rehabilitation facility (16.2% of non-PSH patients compared to 40.7% of PSH patients went directly home). The PSH model of care has been shown to ease the recovery and reduce the cost of hip fractures and is spreading to 13 medical centers within the system of the original study.


Video Games May Help Improve Memory in Older Adults

A Canadian study by psychology professors at the Université de Montréal found that playing 3D platform video games such as Super Mario 64 may stave off mild cognitive impairment and perhaps even prevent Alzheimer’s disease.

The researchers recruited 33 individuals ages 55 to 75 who were randomly assigned to three separate groups. Participants were instructed to play Super Mario 64 or take piano lessons 30 minutes per day, 5 days per week, or were not asked to perform any particular task. The experiment lasted 6 months and was conducted in participants’ homes. Researchers evaluated the effects of the experiment at the beginning and end of the exercise using cognitive performance tests and magnetic resonance imaging (MRI) to measure variations in the volume of gray matter in participants’ brains.

According to MRI results, only participants in the video game cohort saw increases in gray matter volume in the cerebellum and hippocampus, the region of the brain primarily associated with spatial and episodic memory. Their short-term memory also improved. Participants who took piano lessons saw gray matter increases in the dorsolateral prefrontal cortex and cerebellum, whereas some degree of atrophy was noted in all three areas of the brain among those in the passive control group. Further research is needed to determine whether these changes in brain activity were a result of the games themselves or the act of learning something new.


One in Two Homeless Adults Experience Moderate to Severe Chronic Pain

One in two homeless adults reported experiencing moderate to severe chronic pain, according to
research reported in *The Journal of Pain* by researchers from the University of California San Francisco and San Francisco General Hospital. Three hundred fifty homeless adults 50 and older from overnight centers, homeless encampments, and meal programs in Oakland were interviewed at a community-based center that provided social services. The research was designed to describe the severity and duration of pain and its association with demographic and clinical characteristics.

Consistent with previous research, the study showed chronic pain was linked with a posttraumatic stress syndrome, arthritis, and physical abuse. However, there was no association between chronic pain and substance abuse, depression, or chronic medical conditions other than arthritis.

Individuals who are homeless experience challenging physical environments that may contribute to the presence and severity of pain. The authors noted that the study provides the first estimates of chronic pain in a high-risk but poorly understood population. They concluded that the high prevalence of chronic pain in homeless adults 50 and older will require public health interventions that address pain and mental health problems in this growing population.


**Lack of Communication May Put Older Adults at Risk of Adverse Drug Interactions**

Only one third of older adults who take at least one prescription drug have talked to anyone about possible drug interactions in the past 2 years, according to a poll conducted by the University of Michigan Institute for Healthcare Policy and Innovation. The poll results came from a nationally representative sample of 1,690 American adults between ages 50 and 80.

Lack of communication about drug interactions could be putting older adults at risk of health problems such as abnormal blood sugar levels, kidney damage, and accidents related to tiredness.

Part of the reason for lack of communication about drug interactions may lie in how older adults get their health care and medicine. One of five poll respondents indicated using more than one pharmacy in the past 2 years. Three of five respondents saw multiple physicians for their care. Newer medical computer systems that automatically flag patients’ records for potential interactions are helping, but even with advances in technology, it is up to patients, pharmacists, and physicians alike to increase communication and reduce drug interaction risks.


**Mortality Benefits From Light Exercise Including Household Chores**

In a study of more than 6,000 older women of various ethnicities, researchers found that there was a significantly lower risk of death among those who were active at levels only slightly higher than those considered sedentary.

The study, published in the *Journal of the American Geriatrics Society*, used accelerometers to measure physical activity rather than questionnaires, which are typically used in studies of this type. Women wore the devices for between 4 and 7 days, after which researchers downloaded and analyzed the information.

Women who engaged in 30 minutes per day of light physical activity had a 12% lower risk of death than those who did not. Women who were able to complete 30 minutes per day of moderate to vigorous activity had a 39% lower mortality risk. Light physical activities include regular chores, such as folding clothes and sweeping the floor; moderate to vigorous activities included brisk walking or bicycling at a leisurely pace.

Although current public health guidelines indicate that activity should be of at least moderate intensity to gain health benefits, this study shows that health benefits can be achieved even at low intensity. In addition, the study found similar benefits among women of different demographics, indicating that all older adult women can benefit from low-intensity exercise.