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Use of evidence-based therapies after heart attacks in the elderly

More needs to be done to ensure that all elderly patients discharged from the hospital after being treated for a heart attack receive the most appropriate drugs. This finding comes from researchers based at the Institute for Clinical Evaluative Sciences in Toronto. They reviewed findings from a database of patients over age 65 who were admitted to hospital in Ontario between April 2002 and March 2005. They compared these findings with a similar group of patients who were treated a decade earlier. The researchers found that while the number of patients receiving appropriate drugs after discharge from hospital had improved markedly over time, those not under the care of a cardiologist were less likely to receive optimal treatment. The study found that patients being treated by a non-cardiologist or physician who had been in practice for at least 29 years were less likely to be given a prescription for a beta blocker, angiotensin-receptor blocker or angiotensin-converting enzyme inhibitor, or a statin. The researchers concluded that more work needs to be done to ensure that all physicians are educated on the best evidence-based therapies to use when treating these patients.

Pneumococcal vaccination reduces risk of heart attacks

Pneumococcal vaccination appears to cut the risk of heart attacks by half. That's the conclusion of researchers from the University of Sherbrooke in Quebec and researchers from McMaster University in Hamilton, Ont. They assessed a group of patients who suffered a heart attack and were admitted to the University of Sherbrooke hospital between 1997 and 2003. When compared with a group of similarly aged patients who had risk factors for cardiovascular disease but had not had a heart attack, receiving the pneumococcal vaccine was found to have been very protective. In a commentary, Dr. Mohammad Madjid, an instructor in medicine at the Texas Heart Institute, said that if confirmed, the study findings suggest "pneumococcal vaccination could be... a safe and inexpensive tool to prevent cardiovascular events." Doctors should comply with guidelines and increase vaccination rates among patients at high risk for cardiovascular disease, he said.



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Need for speedy repair of hernias in infants

Hernias in infants and young children should be surgically corrected within two weeks to avoid problems that could lead to infertility. A research team based at the Hospital for Sick Children and the Institute for Clinical Evaluative Sciences in Toronto found that delaying the repair of inguinal hernias in children beyond this period doubled the risk of hernia incarceration — where the intestine gets trapped in the hernia and leads to atrophy of the testicles or ovaries (from 5.2% vs. 10.1%). Hospital data for 1065 infants and children under two years of age who underwent surgery for hernias between 2002 and 2004 in Ontario was reviewed to make this finding. The researchers found the median wait time for such surgery was 35 days. Dr. Geoffrey Blair, a leading Canadian pediatric surgeon who commented on the study, said “babies with painful hernias have no political voice” to argue for more health care resources, so more should be done to develop effective strategies to manage wait times for children needing surgery.

TOP: SEAN O'RIORDAN/ISTOCKPHOTO; BOTTOM: JUSTIN HORROCKS/ISTOCKPHOTO

Statin use and delirium after elective surgery

A significant link has been found between a popular class of drugs used to lower cholesterol and the risk of delirium after elective surgery in elderly patients. As a result, the Toronto researchers who made the finding are recommending that doctors consider temporarily halting the use of these drugs — statins — prior to surgery in order to avoid this risk. However, their view is challenged by a US expert who commented on the study and said it would be premature to take such a step. Dr. Edward Marcantonio, director of research in the general medicine and primary care division at the Beth Israel Deaconess Medical Center in Boston, said that while the study presents “a compelling argument” suggesting a link between statin use and post-surgical delirium, more work is needed to confirm the finding. The study linked information on patients age 65 and older who were admitted for elective surgery in Ontario with pharmacy records for the same patients to show the association. The researchers speculated that statins might contribute to delirium by shunting blood away from neurons in the brain after surgery and depriving the brain of oxygen it needs.



What are the risks of the HPV vaccine?

A large Australian study has confirmed the safety of the vaccine currently used in Canada against human papillomavirus (HPV). In an accompanying editorial, Dr. Noni MacDonald and other *CMAJ* editors said that the researchers “provide compelling evidence that the HPV vaccine is remarkably safe.” The Australian researchers, primarily from New South Wales, assessed all cases of anaphylaxis associated with the quadrivalent HPV vaccine (Gardasil) used in Australia since 2007. Their follow-up of more than 260,000 vaccine doses showed an anaphylaxis rate of only 2.6 events per 100,000 doses. None of the reactions to the vaccine resulted in anaphylactic shock, and all of the affected girls recovered fully after receiving epinephrine. A commentary by US vaccine safety expert Dr. Neal Halsey noted that the reasons for the anaphylactic reactions are somewhat unclear and need further study. He said the risk of rare but potentially serious adverse events associated with the HPV vaccine should not discourage its use in school-based clinics.