Forum Tackles the Rising Costs, Challenges and Diminished Outcomes Associated with Treating Obese Patients for Orthopaedic Conditions

PR Newswire

Orthopaedic Surgeons should recommend weight loss to patients prior to joint replacement

ROSEMONT, Ill., April 10, 2013 /PRNewswire-USNewswire/ -- The obesity epidemic in America and its impact on musculoskeletal health, as well as related treatment outcomes and costs, was discussed during the AAOS Now *[1]* forum, "Obesity, Orthopaedics and Outcomes," at the 2013 Annual Meeting of the American Academy of Orthopaedic Surgeons [2](AAOS) at McCormick Place in Chicago.

"From 1960 to 2000, the rate of obesity more than doubled in the United States," said Frank B. Kelly , MD, *AAOS Now* editorial board member and forum moderator. "By 2010, more than 72 million of U.S. adults were obese, and no state had an obesity rate of less than 20 percent." These statistics include children, of whom one in three is considered obese in the United States.

An adult or child with a Body Mass Index (BMI) between 25 and 29.9 is considered overweight. An adult or child with a BMI of 30 or greater is considered obese.

In orthopaedics, evidence is mounting that a high BMI can cause or exacerbate musculoskeletal conditions, such as osteoarthritis, and diminish treatment outcomes. For example, being overweight increases the risk of wound infection, pulmonary complications, deep vein thrombosis (DVT), pulmonary embolism (PE), myocardial infarction (MI) and other complications following orthopaedic surgery.

Elena Losina , Ph.D., associate professor of orthopaedic surgery at Harvard Medical School and Brigham and Women's Hospital in Boston cited poor nutrition, often due to a high-fat diet, overeating and/or excessive eating out; physical inactivity; psychological problems; lack of willpower and metabolic or endocrine disorders as leading causes of weight gain.

Overall, when combined with inactivity, a high BMI can cut life expectancy by as much as seven years, said Dr. Losina.

The impact of obesity on health care spending also is significant, resulting in $215 billion in increased medical expenditures each year, according to a 2010 report by the Brookings Institution. By 2030, "health care costs attributed to overweight and obesity are predicted to account for 16 to 18 percent of total U.S. healthcare costs," said Dr. Kelly.

Dr. Losina explained that each additional kilogram (kg) of body mass increases the

compressive load on the knee by roughly 4 kg. Therefore, even a relatively small loss in weight can have a tremendous impact. For example, a patient who loses 10 pounds in body weight will diminish the load/pressure on their knees by 50 pounds.

A high BMI is associated with more than 60 related medical conditions, including Type 2 diabetes, coronary artery disease and sleep apnea. A high BMI also affects fasting blood glucose levels, which in turn, are associated with a higher risk of surgical site infections, said William M. Mihalko , MD, Ph.D., professor and JR Hyde Chair at the Campbell Clinic department of orthopaedics and biomedical engineering at the University of Tennessee. Overweight and obese patients with sleep apnea who receive regional anesthesia before surgery have higher complication rates following orthopaedic surgery.

Kenneth Krackow , MD, professor and vice-chairman of the department of orthopaedics at the University of Buffalo School of Medicine, said that orthopaedic surgeons need to work with overweight patients before total joint replacement [3] surgery to encourage weight loss – even suggesting bariatric surgery – and utilizing the joint replacement as an incentive for healthier habits.

The forum's findings will appear as separate reports in AAOS Now *[1]* over the next several months:

- Overview, diagnosis, and impact of co-morbidities, "Obese Patients Present a Weighty Problem [4]" (April)
- The impact of a high BMI on specialty care, specifically on pediatric orthopaedics and spine surgery (May)
- Barriers to care and impending discrimination against patients with a high BMI (June)
- Weight gain in athletes and the impact of a high BMI on trauma and foot and ankle care (July)

Forum Agenda Books with study abstracts are available by request (email aaoscomm@aaos.org [5]).

Source URL (retrieved on *05/30/2015 - 8:35am*):
http://www.mdtmag.com/news/2013/04/forum-tackles-rising-costs-challenges-and-diminished-outcomes-associated-treating-obese-patients-orthopaedic-conditions

Links:
[1] http://www.aaos.org/News/aaosnow/index.asp
[2] http://www.aaos-annualmeeting-presskit.org/
[3] http://orthoinfo.aaos.org/topic.cfm?topic=A00233
[4] http://www.aaos.org/news/aaosnow/apr13/cover3.asp
[5] http://www.prnewswire.com/news-releases/mailto:aaoscomm@aaos.org