AMERICAN COLLEGE OF SURGEONS
SURGERY NEWS

Bariatric Surgery Shortens QTc in Obese Patients

BY JANE SALODOF MACNEIL
Elsevier Global Medical News

PHOENIX — Weight loss following bariatric bypass surgery lowered heart rates and resolved most QTc abnormalities in the electrocardiograms of 100 patients in a retrospective study presented at the annual scientific meeting of the Obesity Society.

Dr. Philippe Gilbert reported men and women had significantly slower heart rates at 22 months of follow-up. In men, greater weight loss correlated with reductions in QTc interval. Although women also had shorter QTc intervals as a group after surgery, this did not correlate with weight loss.

Ninety percent of the study population with an abnormal QTc had corrected QTc after surgery.
DR. GILBERT

Dr. Gilbert, a cardiologist at Hôpital Laval in Quebec City, speculated that the sex difference may have occurred because more QTc abnormalities occurred in men.

Bariatric surgery is associated with improvements in comorbidities associated with metabolic syndrome. Dr. Gilbert said he and his coinvestigators decided to look at its impact on electrocardiographic (ECG) abnormalities because obese patients have "a 50%-100% increased risk of death associated with a 1.6-fold increase of sudden death caused by cardiac arrhythmias."

They reviewed 100 consecutive patients who underwent biliopancreatic diversion with a duodenal switch from January 2000 to July 2001, and for whom records of sinus rhythm, 12-lead ECG, and all medications were available. Patients were excluded if no ECG was done during follow-up. The population comprised 32 men and 68 women, who were on average aged 40 and 43 years, respectively, at baseline. Changes in weight, body mass index, heart rate, and QTc before and after surgery were statistically significant for both genders.

Among the men, body weight went from 173 to 104 kg, BMI from 57 to 34 kg/m^2, and heart rate from 83 to 62 beats per minute; their QTc fell from 428 to 411 milliseconds. Among the women, body weight was reduced from 131 to 83 kg, BMI from 50 to 32 kg/m^2, heart rate from 79 to 62 beats per minute, and QTc from 430 to 410 milliseconds.

Dr. Gilbert used graphics to show that the reductions in QTc correlated with the amount of weight loss in men but not in women.

"Ninety percent of our population with an abnormal QTc had corrected QTc after surgery," he said.

He also reviewed use of medications before and after the procedure. Use of calcium channel blockers, metformin, statins, and glyburide—all associated with metabolic syndrome—declined significantly. Use of antidepressants that might prolong QTc intervals stayed about the same, however.

"Considering the high rate of sudden death in this population, normalization of QTc through weight loss could prevent fatal arrhythmias," he noted.

Dr. Gilbert and his coinvestigators said they have no conflicts of interest. ■

Medicaid Spending Will Outpace U.S. Economy

BY MARY ELLEN SCHNEIDER
Elsevier Global Medical News

The price tag for medical assistance under Medicaid is expected to reach nearly $674 billion over the next decade, with the federal government picking up more than $383 billion of the cost, according to projections from the Centers for Medicare and Medicaid Services.

Under this estimate, which was part of the first annual actuarial report on the financial outlook of Medicaid, the program's expenditures for medical assistance are projected to grow on average 7.9% per year for the next 10 years, outpacing the 4.8% growth in the U.S. gross domestic product.

"This report should serve as an urgent reminder that the current path of Medicaid spending is unsustainable for both federal and state governments," Mike Leavitt, secretary of the Health and Human Services department, said in a statement. "If nothing is done to rein in these costs, access to health care for the nation's most vulnerable citizens could be threatened."

Medicaid spending for fiscal 2007 was about $333 billion, with the federal government paying 57% of the cost and the states picking up 43%. The average per-person spending for medical services was $6,120 in fiscal year 2007, with more spent on older and disabled enrollees and less on children. The average per-person spending was $2,435 for nondisabled children and $3,586 for nondisabled adults, compared with $14,058 for older adults and $14,858 for disabled beneficiaries.

Average Medicaid enrollment also is expected to increase over the next decade, according to the report, from 49.1 million in FY 2007 to 55.1 million by FY 2017.

The projections are no surprise given the rising cost of health care overall, said Judith Solomon, senior fellow at the Center on Budget and Policy Priorities, a research organization that analyzes state and federal budget issues. For states, which pay a significant share of Medicaid costs, the 10-year projections are likely be mainly academic, she said, as they struggle to balance this year's budgets in a worsening economy.

The report, issued in October, offers an analysis of past trends in Medicaid and a 10-year projection of expenditures and enrollment. Data and assumptions are based largely on data submitted to CMS from the states, the boards of trustees of the Social Security and Medicare programs, and National Health Expenditure historical data and projections. ■

The full report is available online at http://cms.hhs.gov/ActuarialStudies/03_MedicaidReport.asp.

Longest Prostate Cancer Survival Seen After Surgery

BY DAMIAN MCNAMARA
Elsevier Global Medical News

ORLANDO — Men who have surgery to remove prostate cancer experience better long-term survival than patients who have radiation therapy or watchful waiting, according to a retrospective study of African-American and white men.

Researchers assessed survival among a cohort of 23,811 men diagnosed with prostate cancer enrolled in the HMO Cancer Research Network. Twelve health maintenance organizations nationwide participate in this network.

This source of data has an advantage over previous, population-based studies that assessed potential racial differences in outcomes, said Dr. Gerald Y. Tan. "Comparisons using HMO data may control for treatment selection biases across racial groups. Black men have equal access to care when you use an HMO database versus a population database," said Dr. Tan of the department of urology at New York Weill Cornell Medical Center, New York.

A total of 10,450 men chose watchful waiting for their prostate cancer management, another 6,804 chose radical prostatectomy, and 6,557 chose radiation therapy.

The cohort comprised 3,613 African Americans, 17,345 whites, and 2,853 patients who reported their race as "other." The investigators decided to look for any differences between African American and white men.

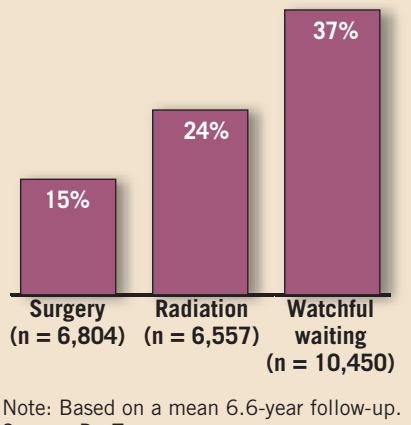
A total of 44% of the African American and white men chose watchful waiting. Among the remaining African American men, 30% chose surgery and 26% chose radiation. Among white men, the percentages were slightly different—28% chose surgery and 28% chose radiation.

Men treated with surgery lived longer than did men in the other two groups, Dr. Tan said at the annual meeting of the American Urological Association.

After a mean follow-up of 6.6 years, 37% of the watchful waiting group, 15% of the surgery group, and 24% of the radiation group had died.

The prostate cancer–specific death rate was highest in the conservative treatment group, regardless of race, and better for African American men versus white men in the radiation and surgery groups, said Dr. Tan, who presented results on behalf of the principal investigator, Dr. Robert A. Leung, a urologist at the same institution. ■

Mortality Lowest With Surgery for Prostate Cancer



Note: Based on a mean 6.6-year follow-up.
Source: Dr. Tan

ELSEVIER GLOBAL MEDICAL NEWS

SYNTAX Sheds Light on Risks of Surgery vs. PCI

BY MITCHEL L. ZOLER
Elsevier Global Medical News

MUNICH — Will patients who need coronary revascularization rather face a small increased risk of a stroke or a larger risk of a repeat procedure within a few months?

That is the decision facing patients with complex coronary disease, based on results from the largest and most tightly controlled study to ever compare percutaneous coronary stenting and coronary surgery.

"The risk of death, stroke, and MI is identical" between coronary stenting and surgery during the first year following intervention, "but the risk of more reintervention with PCI [percutaneous coronary intervention] is real," Dr. Patrick W. Serruys said at the annual congress of the European Society of Cardiology.

'The risk of death, stroke, and MI is identical' between coronary stenting and surgery 1 year after intervention.
DR. SERRUYS

Many other patients who need revascularization won't have a choice, based on findings from the Synergy Between Percutaneous Coronary Intervention With Taxus and Cardiac Surgery (SYNTAX) study. Out of 3,075 enrolled patients with either left main disease or triple vessel disease, 1,275 (41%) were judged by a team of cardiologists and cardiac surgeons to have no alternative in their revascularization treatment because of the complexity of their disease (including chronic total occlusion), comorbidities, or other factors that ruled out either surgery or stenting. For 1,077 of the nonrandomized patients (84%), bypass surgery was the only recourse; for the other 198 nonrandomized patients (16%), surgery was not feasible and so they had to be treated by PCI.

The other 1,800 patients (59%) in the study were deemed equally amenable to stenting or surgery and were randomized.

Although the results from both the randomized and registry arms highlighted recent progress toward better outcomes by both interventionalists and surgeons, the findings "probably will not change the number" of patients in routine practice who undergo stenting or have surgery, commented Dr. Spencer B. King III, an interventional cardiologist and executive director of academic affairs at Saint Joseph's Health System in Atlanta.

"About 80% of the types of patients in SYNTAX now go to surgery in the United States, and my guess is that this will stay the same," Dr. King said in an interview.

"The majority of these patients are seen by interventional cardiologists, and they are the biggest referrers of patients to surgeons. Surgeons do patients like these"—patients with left main or triple vessel disease—"all the time. It's bread-and-butter surgery," said Dr. King. But "these are hard cases for interventionalists. They take hours, and most interventionalist cardiologists don't want to do them," commented Dr. W. Douglas Weaver, chief of cardiology at Henry Ford Hospital in Detroit.

Another limitation of the new findings is that patients were followed for just 1 year. The new data "add to the discussion of using PCI for left main disease, but 1 year of follow-up is not very long to say that survival in patients with left main disease" is as good as in patients treated with surgery, he said. "The danger is that patients who develop a severe restenosis in their left main may die."

SYNTAX was done at 62 centers in Europe and 23 centers in the United States. Patients who entered the randomized part of the study had an average age of 65, and about 28% had diabetes. About two-thirds of patients had triple vessel disease, and about a third had a significant left main stenosis (patients with left main disease could also have additional stenoses in one, two, or three other coronary arteries). All of the lesions were previously untreated, none of the patients had an acute MI, and none of the bypass-surgery patients received concomitant cardiac surgery.

The patients treated with stents received an average of 4.6 stents each. All of the coronary stents used in the study were paclitaxel-eluting models. Although the study used Taxus stents exclusively, Dr. Serruys and the study cochair, Dr. Friedrich W. Mohr, reported no conflicts of interest.

Event Rates 1 Year After Coronary Stenting and Surgery

Outcome	CABG (n = 897)	PCI (n = 903)
Death	3.5%	4.3%
Nonfatal stroke	2.2%	0.6%*
Nonfatal myocardial infarction	3.2%	4.8%
Combined rate of death, stroke, and MI	7.7%	7.6%
Repeat revascularization	5.9%	13.7%*
Combined rate of death, stroke, MI, and repeat revascularization	12.1%	17.8%*

* Statistically significant difference between groups
Source: Dr. Serruys

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After 1 year, the combined rate of death, nonfatal cerebrovascular accident (stroke), or nonfatal MI was virtually identical: 7.6% in 903 PCI patients, compared with a 7.7% rate in the 897 patients treated with coronary artery bypass grafting (CABG). The breakdown by individual event types showed that the only statistically significant difference between the two groups was a 2.2% rate of stroke in the CABG patients, compared with a 0.6% rate in the PCI patients (see box).

The study's primary end point combined the rate of these three "irreversible" events with the fourth major outcome, need for revascularization. The total for all four types of outcomes after 1 year was 12.1% in the CABG patients and 17.8% in the PCI patients, a significant difference.

This rate was also used to judge whether PCI was noninferior to CABG. The prespecified, noninferiority limit was a difference of less than 6.6% between the two treatments. Because the 95% confidence range for the quadruple end point was an excess as high as 8.3% in patients having PCI, the test for noninferiority was not met, and so technically the results did not prove that PCI is not inferior to CABG. But Dr. Serruys acknowledged that having a combined end point that included revascularization was a controversial decision.

"We often talk about the hard, irreversible end points of death, stroke, and MI. These end points do not have the same value as the nuisance of going back for repeat revascularization," said Dr. Serruys, professor of interventional cardiology at the Thorax Center at Erasmus University in Rotterdam, the Netherlands.

"Reinterventions still limit PCI, but we're doing better with drug-eluting stents," commented Dr. Christian W. Hamm, a cardiologist at the Kerckoff Heart Center in Bad Nauheim, Germany.

The 1-year rate of stent thrombosis or graft occlusion was also virtually identical, 3.3% with PCI and 3.4% with CABG.

The registry data collected on the nonrandomizable patients who entered SYNTAX showed a similar pattern of results. In 192 of the 198 patients who could be treated only by PCI and were followed for 1 year, the combined rate of death and MI was 10.5% and there were no strokes. In 644 patients who could be treated only by CABG and were followed for 1 year, the combined rate of death, MI, and stroke was 6.6%, including a 2.2% rate of strokes. The repeat revascularization rates were 12.0% with PCI and 3.0% with CABG, producing a combined, quadruple end point rate of 20.4% with PCI and 8.8% with CABG, reported Dr. Mohr, a cardiovascular surgeon at the Heart Center of the University of Leipzig, Germany.

Future analyses from SYNTAX will examine the relative safety and efficacy of PCI and CABG based on the diabetes status of patients, and based on illness severity using a measure called the SYNTAX score, Dr. Serruys said. ■

Salvage Surgery Aids Survival in Head and Neck Cancer

BY ROBERT FINN
Elsevier Global Medical News

SAN FRANCISCO — Aggressive salvage surgery should be offered as a potentially curative treatment for resectable patients with recurrent squamous cell carcinoma of the head and neck, Christina S.T. Wilhoit, said at the Seventh International Conference on Head and Neck Cancer.

In a retrospective study of 61 patients who underwent such salvage surgery from 1999 to 2005, their average survival was 27 months, reported Ms. Wilhoit, a certified clinical researcher at the Medical University of South Carolina, Charleston. In contrast, she noted, other studies have suggested that average survival is 12 months following reirradiation and just 6 months following chemotherapy,

Ms. Wilhoit displayed a Kaplan-Meier curve comparing survival in stages I-IV disease and extending out 84 months. At 1 year, survival rates in the single-institution study ranged from 100% in stage I to about 50% in stage IV. At 2 years the range was about 80% for stage I to 40% for stage IV, and at 5 years about 60% to 20%, respectively.

"Recurrent overall stage showed the most correlation with survival outcomes in these cancer patients," stated the researchers.

Some recent studies have called salvage surgery into question, and at some institutions chemotherapy and reradiation protocols now are more common for recurrent head and neck squamous cell carcinoma. But aggressive salvage surgery has long been the practice at the Medical University of South Carolina, Ms. Wilhoit said.

None of the patients studied died in the immediate postoperative period. Ten patients (16%) experienced major complications, and another 5 (8%) experienced minor complications. One case of pulmonary embolism was the only major systemic complication. There were two other minor systemic complications: fever and supraventricular tachycardia, both of which resolved.

The most common major local complications reported by Ms. Wilhoit and her coauthors were dysphagia, fistula, and hematoma; there were also cases of partial flap necrosis, flap loss, wound breakdown, and wound hemorrhage.

The minor local complications included two patients with a hematoma and one with a seroma.

Ms. Wilhoit concluded that salvage surgical resection for recurrent squamous cell carcinoma of the head and neck has acceptable complication rates and superior overall survival rates, compared with other treatments.

She said salvage surgery should be offered as a potentially curative treatment for resectable patients.

Ms. Wilhoit declared no conflict of interest related to this study. ■