

surgery

by Patricia Nicholson



Stars attending the Toronto International Film Festival weren't the only visitors in Toronto last month. Surgeons from across the country gathered here for the Canadian Surgery Forum from Sept. 6 to 9 to hear the latest research on thoracic, colorectal and general surgery. Some of the most popular topics were bariatric procedures and advances in minimally invasive techniques. Staff writer Patricia Nicholson was there and files the reports here and on pages 18 and 19.

Bariatric surgery a boon to health and wealth

Patients report better work and social lives

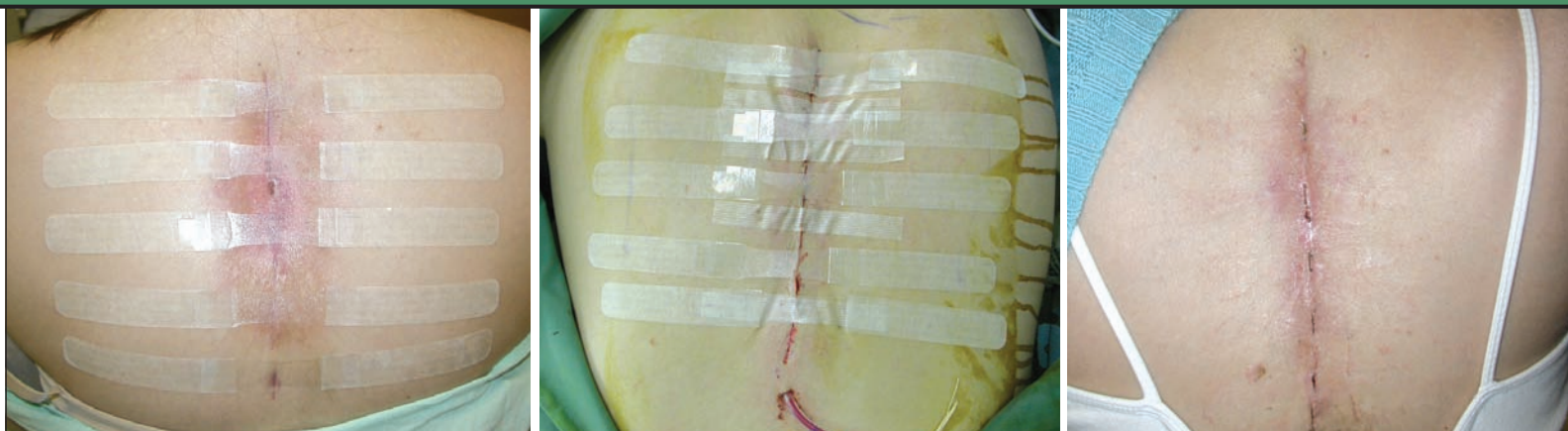
TORONTO | Bariatric surgery not only measurably improves patients' overall health status, but also boosts their socio-economic status, new research presented here at the Canadian Surgery Forum indicates.

Dr. Salman Al-Sabah of the McGill University Health Centre in Montreal led a study of 391 patients who had undergone bariatric surgery and were being followed at the centre's bariatric clinic. Mean followup time was 3.8 years (minimum six months, maximum 19.6 years). Demographic and socioeconomic data, as well as levels of satisfaction with postsurgical weight loss and the effects of surgery on health-related quality of life, were collected using an obesity-specific postoperative questionnaire.

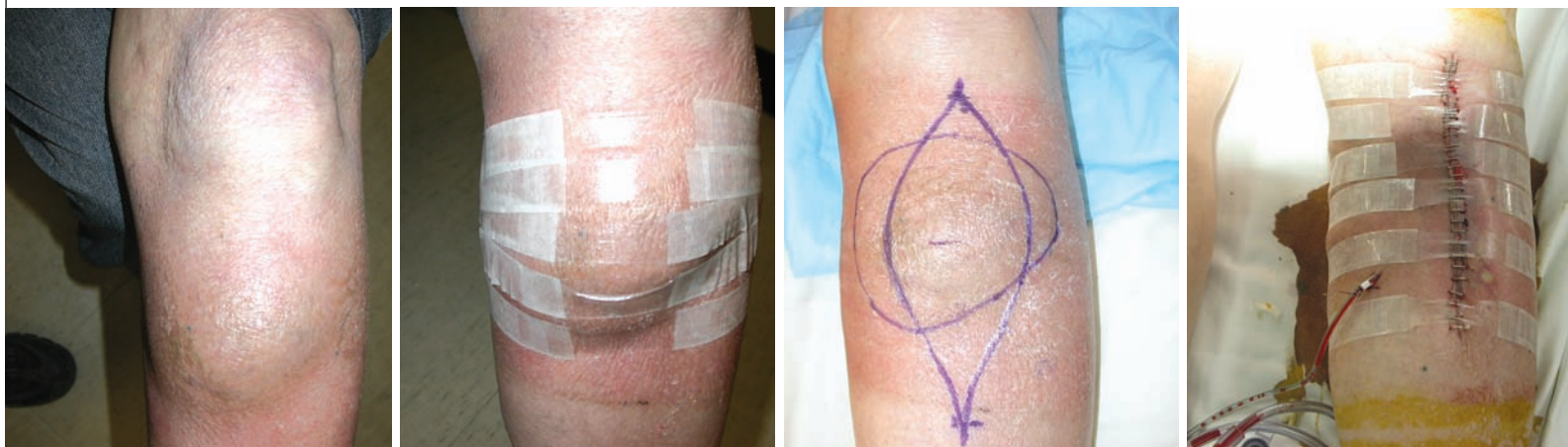
The study involved 309 females and 82 males, with a mean age of 42. The mean pre-surgical body mass index was 52.5. Mean followup BMI was 32.5.

As might be expected, there was a significant decrease in the number of patients with obesity-related conditions—including cardiac disease, high cholesterol and diabetes—following surgery. But benefits extended to social and professional

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Wide excision of a leiomyosarcoma from a radiated field with prior resection. Dynamic expansion with DynaStretch tapes for five days preop (left) and postop photos showing healing.



Excision of myxoid liposarcoma from shin; surgical field complicated by preop radiation. Dynamic expansion with DynaStretch tapes for five days preop and two weeks postop.

Photos courtesy of Dr. Ralph George, Queen's University

Skin-expanding tape provides easier closure for complicated wounds

Technique could be a boon to areas where plastic surgeons rare

TORONTO | A simple adhesive skin-expanding device may enable primary closure of wide lesions in tricky locations without the use of skin grafts. A series of 13 cases using the device was presented here at the Canadian Surgery Forum.

DynaStretch tapes can help close the type of large lesions required for excision of tumours, particularly in areas where hypertrophic scarring is likely, or areas with poor skin mobility. The tapes—developed by Almonte, Ont.-based Canica Design—comprise two adhesive strips joined lengthwise by an elastomer. Worn for four to seven days preoperatively, the device provides constant

tension in the incision area to slowly stretch the skin.

Variety of surgeries

The 13 surgeries performed thus far using the device include cancers excised from the ankle, scapula, scalp, upper arm, mid-back and chest wall. Three cases involved resection of areas that had previously been irradiated.

In all 13 cases, primary closure was successfully achieved without grafting, and with good cosmetic results. There was one case of flap necrosis, which was managed conservatively and did not require a second

procedure. One wound became infected, requiring packing and antibiotics, but no second procedure. Other than the mild irritation that would be expected with any skin adhesive, there were no adverse effects from the adhesive device.

"It's a very well-tolerated, easy way to provide closure for complicated wounds," study author Dr. Regan Berg, a surgical resident at Queen's University in Kingston, Ont., told the *Medical Post*.

It could enable surgeons with less training to close complicated wounds that would otherwise have to be closed by a plastic surgeon using complicated flaps, Dr. Berg said. He noted doctors in rural areas may not always have access to a plastic surgeon.

Incision site affects hernia risk for laparoscopic colorectal surgery

Hernias more common in midline incisions than in off-midline incisions

TORONTO | Prospective data presented at the Canadian Surgery Forum suggest extraction incision sites for laparoscopic colorectal surgery may influence risk of incisional hernia, a common and potentially serious postoperative complication of abdominal surgery.

The comparison of incision sites indicated incisional hernias are significantly more common in midline incisions than off-midline incisions.

Dr. Ravinder Singh of North Bay General Hospital's Centre for Minimal Access Surgery in North Bay, Ont., presented the prospective study evaluating the incidence and location of incisional hernias in 208 consecutive patients who underwent laparoscopic colorectal surgery from March 2002 to July 2006.

Forty-two patients were



Dr. Singh

excluded because they either did not have an abdominal wall incision, were converted to open surgery, required postoperative laparotomy due to complications or were lost to followup.

Of the 166 patients included in the analysis, 74 had midline extraction incisions and 92 had off-midline incisions. Mean followup time in

the study was 20 months.

There were no differences between the midline and off-midline groups in known risk factors for incisional hernia, such as age, obesity and wound infection.

Off-midline incision

None of the patients in the off-midline group developed incisional hernias, but 13 patients with midline extraction incisions developed hernias (see table).

"When comparing the findings for clinical incisional hernia, all the hernias that we

detected were in the midline group, and this was statistically significant in terms of the difference," Dr. Singh said.

"In conclusion, midline incisions appear to be quite prone to hernia development, where off-midline incisions appear to be very resistant to this. Thus we no longer use midline incisions to extract the bowel."

Incisional hernias

Incisional hernias by extraction incision site

	# Patients	# Hernias	
Midline	74	13	17.6%*
Off-midline	92	0	0%
Total	166	13	7.8%

*statistically significant