

# Severe obesity increases risks of health problems during surgery

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Healthcare providers must carefully consider the unique risk factors related to severe obesity in patients undergoing all types of surgery, according to an American Heart Association scientific advisory published in *Circulation: Journal of the American Heart Association*.

Heart problems in particular are often underestimated during a physical examination in the severely obese patient, according to the advisory.

"A severely obese patient can be technically difficult to evaluate prior to [surgery](#)," said Paul Poirier, M.D., Ph.D., lead author of the advisory and associate professor at Université Laval Institut universitaire de cardiologie et de pneumologie Hôpital Laval in Québec, Canada. "For example, severely obese people might feel chest tightness that could be a symptom of their obesity or of an underlying cardiac problem. Doctors need to carefully evaluate severely obese patients before they have surgery."

Severe obesity describes people with a body mass index (BMI) of 40 or higher. This type of obesity, affecting 3 percent to 4 percent of the population, is associated with health problems that may lead to disability and death.

"In the obese population, the severely obese make up the fastest growing segment," Poirier said.

The advisory provides cardiologists, surgeons, anesthesiologists and

other healthcare providers pre-operative evaluation recommendations, along with information on managing and caring for obese patients during and after any surgery, including such procedures as knee replacement, abdominal surgery or a heart operation.

Conditions associated with obesity that could increase heart risks in surgery include:

- Heart failure
- Atherosclerosis (thickened or narrowed arteries)
- High blood pressure
- Heart rhythm disorders
- History of blood clots (especially pulmonary embolism)
- Poor exercise capacity
- Pulmonary hypertension related to sleep apnea

The clinician should consider age, gender, cardiorespiratory fitness, electrolyte disorders and heart failure as independent predictors for death or complications from surgery, according to the advisory.

The advisory offers a proposed scoring tool to assess risk for patients preparing to have weight-loss surgery and Poirier says additional research is also needed to develop obesity risk scores to identify patients at increased risk specific to other surgeries.

Healthcare providers should be aware that severely obese patients are

more likely to stay on a ventilator longer and have a longer hospital stay than patients who are not severely obese, the statement's authors said.

It's reasonable to do an electrocardiogram and a chest X-ray in this population, and other non-invasive testing, including exercise testing, may also be advisable, according to the advisory.

However, "some surgeons are under the impression that severely obese patients are more likely to die in surgery than people who are not obese, and won't operate on them as a result," Poirier said. "This is not true. Severely obese patients are at increased risk for pulmonary embolism, wound infection and other conditions. But they are not more likely than their lower-weight counterparts to die as a result of surgery."

Severely obese people should ask their surgeons whether a particular surgery is safe for a patient their size.

"Since recovery can be a problem for these patients, we recommend that they take steps to be as healthy as possible before going into surgery," Poirier said. "For example, the person with diabetes should get his or her blood sugar under control."

Source: American Heart Association ([news](#) : [web](#))

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