

Heart injury reduced after bariatric surgery but not lifestyle intervention

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Heart function in morbidly obese patients returns to in the surgery group (p normal after bariatric surgery but not after lifestyle intervention, reveals research published today in the *European Journal of Preventive Cardiology*. The results suggest that bariatric surgery² may reduce the risk of cardiovascular disease in morbidly obese patients.

"Obesity is a global problem that is closely linked to the development of [cardiovascular disease](#)," said lead author Dr Magnus N. Lyngbakken, a PhD candidate at the University of Oslo in Norway. "Morbidly [obese patients](#) are at high risk of heart attack, heart failure and diabetes."

Approximately one in five western Europeans are obese and have a [body mass index](#) (BMI) over 30 kg/m², while around 2 to 3% are morbidly obese (BMI over 35 to 40 kg/m²).

The study published today investigated whether weight loss by [bariatric surgery](#) could reduce levels of high-sensitivity cardiac troponin I (hs-TnI) in morbidly obese patients, which would indicate reduced cardiac stress and chronic subclinical cardiac injury. Cardiac troponins are traditionally used to diagnose acute ischaemic injury and confirm that a patient had a heart attack. The more recent high-sensitive test also identifies low-grade, chronic cardiac damage in patients who do not have established cardiovascular disease.

Concentrations of hs-TnI were compared between 74 morbidly obese patients who had a type of bariatric [surgery](#) called Roux-en-Y gastric bypass, 62 morbidly obese patients who exercised and restricted their calorie intake, and a control group of 30 people with normal weight.

At the beginning of the study, hs-TnI levels were 2.40 ng/L in the bariatric surgery group, 2.35 ng/L in the lifestyle intervention group, and 0.90 ng/L in the normal weight group. At 12 months after the intervention, hs-TnI levels decreased significantly

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