Management of overweight and obesity in adults with established CVD

Heart Foundation

Assessment

Use BMI + another anthropometric measure (waist circumference OR waist-to-height ratio OR waist-to-hip ratio)

Assess for underlying causes of obesity, comorbidities, cardiometabolic risk factors and complications of obesity

Management

Optimise management of other cardiovascular risk factors

Blood pressure, lipids, blood glucose, smoking, alcohol, adherence to preventative medicines (e.g. lipid-modifying therapies, antihypertensives, antiplatelet therapies, where clinically relevant)

BMI 25–26.9 kg/m²	BMI 27–34.9 kg/m²	BMI ≥ 35 kg/m² [a]

Physical activity and nutrition modifications

Advise heart-healthy eating pattern and consider reduced energy intake where required

Advise regular physical activity; combined moderate-to-vigorous aerobic activity and resistance training

Obesity management pharmacotherapy

Consider in type 2 diabetes (to reduce risk of MACE)[b,c,d]	Consider in atherosclerotic CVD (to reduce risk of MACE)[c]	Consider in HFpEF (to improve symptoms and functional capacity)[c]
Semaglutide[1,2] Tirzepatide[3] Liraglutide[4]	Semaglutide[5]	Semaglutide[e 6,7] Tirzepatide[f 8]

If weight-related health improvements[g] not achieved

Multidisciplinary specialised obesity services

Metabolic bariatric surgery

Lifelong monitoring and assessment

Continue to assess and manage CVD risk factors. Maintain a heart-healthy eating pattern and regular physical activity. Early intervention if required.

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Abbreviations: BMI, body mass index; HFpEF, heart failure with preserved ejection fraction; MACE, major adverse cardiovascular events; TGA, Therapeutic Goods Administration

References: hrt.how/obesityrefs

Footnotes:

[a] People with BMI ≥ 40 kg/m² may require direct referral for multidisciplinary specialised obesity services.

[b] Evidence is based on studies conducted in people with type 2 diabetes whereby medication doses are generally lower than those used for weight loss.

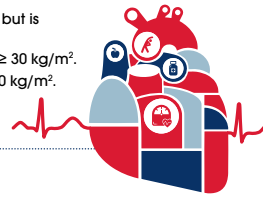
[c] SGLT-2 inhibitors are not TGA-indicated for obesity management but have been shown to have modest weight-lowering effects in these groups (less so than other agents listed here). They have been shown to improve CV outcomes in type 2 diabetes, heart failure, atherosclerotic CVD and CKD.

[d] Dulaglutide, indicated in type 2 diabetes, has been shown to improve CV outcomes, but is not TGA-indicated for obesity management.

[e] Based on STEP-HFpEF trial data in people with HFpEF, ejection fraction ≥ 45% and BMI ≥ 30 kg/m².

[f] Based on SUMMIT trial data in people with HFpEF, ejection fraction ≥ 50% and BMI ≥ 30 kg/m².

[g] Weight-related health improvements include improvements in blood glucose levels, lipids, blood pressure and liver function.



Incretin-based pharmacotherapies for obesity management

Medication name and medication class	Mechanism of action	TGA indications for obesity management in adults*	Dose	Common side effects	Efficacy for weight loss (approximate % of total body weight lost[¥ §])	Impact on CV outcomes compared with placebo
Semaglutide (Wegovy) GLP-1 receptor agonist	• Enhances satiety • Delays gastric emptying • Decreases appetite	BMI ≥ 30 kg/m^2 OR ≥ 27 kg/m^2 in the presence of one or more weight-related complications	• Start at 0.25 mg subcut. once weekly • Titrate: - Weeks 1–4: 0.25 mg - Weeks 5–8: 0.5 mg - Weeks 9–12: 1 mg - Weeks 13–16: 1.7 mg - Maintenance dose: 2.4 mg once weekly	Nausea, vomiting, diarrhoea, constipation, dyspepsia, abdominal pain, injection site reactions	9–10%[1]	• Reduced risk of CV death, non-fatal MI and non-fatal stroke in people with established atherosclerotic CVD (without type 2 diabetes)[1] and in people with type 2 diabetes at high risk of CVD[2] • Reduced risk of CV events in people with type 2 diabetes and chronic kidney disease[3]
Tirzepatide (Mounjaro) GIP/GLP-1 receptor agonist	• Enhances satiety • Delays gastric emptying • Decreases appetite	BMI ≥ 30 kg/m^2 OR ≥ 27 kg/m^2 in the presence of one or more weight-related complications	• Start at 2.5 mg subcut. once weekly. After four weeks, increase dose to 5 mg subcut. once weekly • If needed, dose increases can be made in 2.5 mg increments • Maximum dose is 15 mg once weekly	Nausea, vomiting, diarrhoea, constipation, dyspepsia, abdominal pain, injection site reactions	11–12%[4]	Reduced risk of CV death, non-fatal MI and non-fatal stroke in people with type 2 diabetes and atherosclerotic CVD[4 #]
Liraglutide (generics available) GLP-1 receptor agonist	• Enhances satiety • Delays gastric emptying • Decreases appetite	BMI ≥ 30 kg/m^2 OR ≥ 27 kg/m^2 in the presence of one or more weight-related complications	• Start at 0.6 mg subcut. once daily • Increase weekly by 0.6 mg (as tolerated) to a maintenance dose of 3.0 mg once daily	Nausea, vomiting, diarrhoea, constipation, dyspepsia, abdominal pain, injection site reactions	6–8%[5 ζ]	Reduced risk of CV death, non-fatal MI or non-fatal stroke in people with type 2 diabetes at high risk of CVD[6]

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Abbreviations: BMI, body mass index; CV, cardiovascular; CVD, cardiovascular disease; MI, myocardial infarction; TGA, Therapeutic Goods Administration

References: hrt.how/obesityrefs

Footnotes:

* Consult TGA indications and Pharmaceutical Benefits Scheme criteria to guide pharmacotherapy choice, tailored to the individual context.

¥ Approximate percentage total body weight lost is based on trials including people with type 2 diabetes where pharmacotherapy dose may not represent the highest dose available for weight loss.

§ Weight loss efficacy for each agent varies by patient cohort; figures for injectable medications have been derived from published cardiovascular outcome trials.

\# Non-inferiority cardiovascular outcome trial with dulaglutide as comparator (not placebo controlled).

ζ The SCALE trial was used as the reference for approximate percentage of total body weight lost, in preference to the LEADER cardiovascular outcome trial (used approximately half the maintenance dose of liraglutide that is indicated for obesity management).

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