Positive Cardiometabolic Health: an early intervention framework for patients on psychotropic medication

**Smoking**
- Current Smoker
- Brief individual intervention: Smoking cessation program quitnow.info.au

**Lifestyle**
- Poor diet AND/OR Sedentary lifestyle

**Obesity**
- BMI (kg/m²) > 25 AND/OR Weight ↑≥ 5kg
- Male ≥ 94cm* AND/OR Female ≥ 80cm AND/OR Waist ↑≥ 5cm

**Blood Pressure**
- >140 systolic AND/OR >90 diastolic

**Fasting Blood Glucose**
- > 5.6 mmol/L

**Fasting Blood Lipids**
- > 6.5 TChol (>5.5 TChol if diabetic) AND/OR >2.0 Trig

**Polycystic ovary syndrome**
- No periods for 3 months^ Acne Hirsutism

**Structured nutritional counseling and modify lifestyle**

**Consider antipsychotic switching; review medications and rationalize any polypharmacy**

**Target Smoking cessation**
- Improve quality of diet
- Contain energy intake
- Daily exercise

**Target**
- BMI 20-25 and WC <94 males* < 80cm females

**Target**
- Fasting glucose ≤5.5 mmol/L
- If diabetic: HbA1c <7%

**Target**
- TChol ≤ 5.5 mmol/L
- LDL ≤ 4 mmol/L
- Trig ≤ 1.6 mmol/L

**Target**
- Regular menstrual cycle

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* for south Asians, Chinese, south and central American and Japanese individuals, recommend WC target < 90cm

^ for premenopausal women
**History:** smoking, exercise, diet, FHx (diabetes, obesity, CVD), gestational diabetes, ethnicity, Polycystic ovary syndrome

**Then at least 3 monthly**

**Examination:** weight, BMI, waist circumference, BP

**Investigations:** Fasting blood glucose and lipids: total cholesterol (TChol); LDL, HDL, triglycerides (Trig);


**Interventions:**

**Nutritional counseling:** reduce take away and junk food, reduce energy intake to prevent weight gain, stop soft drinks and juices, increase fibre intake.

**Physical activity:** structured education-lifestyle intervention. Advise daily physical activity: eg 30 minutes of walking.

*If unsuccessful after 3 months in reaching targets, then consider switching and medication interventions below*

**Switching:** Consider switching to a more weight neutral medication. Review diagnosis and ensure ongoing need for all psychotropic medications.

**Screen cardiometabolic risk factors using screening tool (eg Waterreus, et al 2009, Curtis et al 2009 SESLHHD); examine and investigate 3 monthly on all clients on psychotropic medications.**

**NB additional considerations for those on mood stabilizers & clozapine not included here and need to be performed (eg medication plasma levels, TFT’s UEC’s, ECHO, etc)**

Always involve general practitioner, and, where appropriate and possible refer to specialist (eg dietitian/ physician/ diabetic clinic/ exercise physiologist).

**NB:** Some drugs used in metabolic disease treatment are contraindicated in pregnancy (eg some antihypertensives and lipid lowering drugs). If your patient on any metabolic medications is considering pregnancy, please discuss with their GP.

**Specific Pharmacological Interventions:**

**Consider metformin if:**

- impaired glucose
- PCOS
- obesity or rapid weight gain

**Metformin therapy:** start at 500mg x ½ tablet before breakfast and dinner for two weeks then increase to 500mg bd. Dose can be increased to a maximum of 3 grams daily, though as this is off label treatment, no adverse effects should be tolerated. If side-effects of nausea, abdominal cramping, shift to after meal.

**Lipid lowering therapy:** (use PBS guidelines)

- **Statin initiation doses for cholesterol lowering:** simvastatin 10 mg nocte atorvastatin 10mg nocte pravastatin 10mg nocte rosuvastatin 10 mg nocte

- **Fibrate therapy for triglyceride lowering:** gemfibrozil 600 mg bd fenofibrate 145 mg mane

**Anti hypertensive therapy:** Multiple agents are available. Liaise with the GP who can monitor.

**Vitamin D:**

- <50 nmol/L: replenish stores: cholecalciferol 4,000 IU per day for one month;  
- maintenance: 1,000 IU daily. Target >80nmol/L.

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