GPSA
GENERAL PRACTICE SUPERVISION AUSTRALIA

Management of type 2 diabetes mellitus

Diabetes is a serious and progressive chronic condition with significant morbidity and mortality, and as such is one of Australia's national health priorities. It is estimated that by 2045, 2.5 million Australians will live with diabetes. Diabetes is managed at a rate of about 4 per 100 encounters in Australian general practice and is the 5th most commonly managed problem overall. Additionally, it is the most common problem for which pathology is ordered. GP registrars will usually be familiar with assessment and management of acute presentations of diabetes in the ED setting e.g. DKA, but issues like screening, risk factor assessment, and chronic disease management are likely to be new. This is the second of two GPSA teaching plans on type 2 diabetes – the first addresses screening and diagnosis.

TEACHING AND LEARNING AREAS

- Key elements and goals for optimal management of diabetes
- Assessment and management of complications, co-morbidities and CV risk
- Approach to monitoring diabetes
- Motivational interviewing for behavior change
- Non-pharmacological approaches to management
- Drug therapy of diabetes including starting insulin
- Appropriate use of Medicare items – GPMP, TCA, DM cycle of care etc.
- Indications and pathways for referral, including allied health
- Practice systems for nurse assessment, recall and reminders
- Approaches to self-management and sick day management
- Diabetes management in Aboriginal and Torres Strait Islander people
- Diabetes and driving

PRE- SESSION ACTIVITIES

- Read the NPS Medicinewise article Medicines for type 2 diabetes: 2022 update

TEACHING TIPS AND TRAPS

- Effective diabetes management requires both 1. a patient-centred approach and shared decision making, as well as 2. a systematic and coordinated approach to care e.g. registers, recalls and reminders
- The general therapeutic goal for people who are overweight or obese with type 2 diabetes is 5–10% weight loss
- Regular physical activity of any kind can have a positive impact on glycaemic control, CVD risk and overall mortality
- Combined aerobic exercise plus resistance training leads to better improvement in HbA1c than either alone
- Consider deprescribing of medications for managing diabetes in the elderly and frail
- HbA1c may be inaccurate in a number of situations e.g. CRF, haemoglobinopathies
- Routine self-monitoring of blood glucose in low-risk patients who are using oral glucose-lowering drugs is not recommended
- Bariatric surgery should be considered in selected morbidly obese individuals
- Education to support self-management is an integral part of diabetes care

RESOURCES

Read

- Management of type 2 diabetes: A handbook for general practice 2020
- 2015 RACGP AFP article Diet and diabetes
- 2021 AJGP article Management of patients with type 2 diabetes and cardiovascular disease in primary care
- Glucagon-like peptide-1 receptor agonist (GLP1-RA) therapy in type 2 diabetes

Watch

- The DiRECT diabetes remission trial – an interview with Mike Lean

Listen

- 2018 Australian Prescriber article Second steps in managing type 2 diabetes
- 2021 Australian prescriber podcast – Harms and benefits of SGLT2 inhibitors
- 2023 Australian Prescriber podcast: Update to the TG Guideline on Diabetes

FOLLOW UP & EXTENSION ACTIVITIES

- Registrar to undertake clinical reasoning challenge and discuss with supervisor

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Clinical Reasoning Challenge

Yves is a 62-year-old retired architect who has a 12-year history of Type 2 diabetes mellitus. He also has a history of hypertension and hyperlipidaemia. He is usually looked after by another GP in the practice who is currently on maternity leave. He takes the following medications:

- MetforminXR 1000mg bd
- Gliclazide MR 60mg daily
- Perindopril 5mg daily
- Atorvastatin 40mg daily

Yves presents to you for review of recent blood tests and repeat prescriptions. His blood tests from the previous week show that his HbA1c is 7.8% (previous result 7 months ago 7.5%). Other results are satisfactory.

QUESTION 1. What are the most likely reasons for Yves' poor diabetic control. List up to five.

1 _____

2 _____

3 _____

4 _____

5 _____

QUESTION 2. On further assessment, there is nothing apparent on history or examination to contribute to his deteriorating diabetic control. What are the next options in Yves' diabetic management? List up to four broad management options.

1 _____

2 _____

3 _____

4 _____

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ANSWERS

QUESTION 1

What are the most likely reasons for Yves' poor diabetic control. List up to five.

- Poor adherence to medications
- Poor adherence to lifestyle factors (diet, exercise etc.)
- Weight gain
- Disease progression and inadequate treatment
- Intercurrent illness e.g. infections
- Concurrent medication use e.g. corticosteroids

QUESTION 2

On further assessment, there is nothing apparent on history or examination to contribute to his deteriorating diabetic control. What are the next options in Yves' diabetic management? List up to four broad management options.

- Commence an additional oral agent
- Commence insulin
- Refer for endocrinology review
- Refer for allied health review (diabetic educator, exercise physiologist, dietician)

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