Q&A: Medicines optimisation in primary care – taking a patient-centred approach

As part of the Primary Care Diabetes Society's Virtual Smart Update in Diabetes 2020 programme, Su Down answers questions from primary care regarding diabetes remission, medicines optimisation, treatment individualisation and more. This Q&A session was part of a broadcast series and is now available to watch on demand. To view this and the other sessions, and to access the Q&A write-ups and case studies, visit https://live.diabetesonthenet.com/smart.

Diet and lifestyle intervention

When should we start talking with our patients about type 2 diabetes remission?

- Start having conversations about remission from the point of type 2 diabetes diagnosis. If patients are unaware that remission is possible, they may not raise the subject with their healthcare professional (HCP).

How should counselling and lifestyle advice be approached in people with type 2 diabetes?

- Encouraging people to change activity levels and dietary habits is challenging and requires ongoing discussions.
- The question "If there was one thing you could change about your life with diabetes, what would it be?" can be used to highlight what people are most motivated about.
- Careful listening leads to an understanding of the person's relationship with diabetes.
- People only recall about 20% of discussions with their HCP (Richard et al, 2017). Therefore, it is important to check what they have understood before the consultation ends and to emphasise key points they may have missed.

How should people with type 2 diabetes who want to start a low-carbohydrate or ketogenic diet be advised?

- Talk to them about how they feel they may achieve weight loss, as dieting is not the only option; it's the amount of weight lost that is important.
- Clarify which diet is being referred to; for example, low-carb or very-low-carb ketogenic.
- If a person with type 2 diabetes is on a sodium–glucose cotransporter 2 (SGLT2) inhibitor and proposing to go on a diet containing <50 g of carbohydrates per day, the SGLT2 inhibitor should be withheld while they are on the diet. Early reassessment is advised if the person changes or stops the diet.
- Refer to resources and diet plans from Diabetes UK (2020).

Medicines optimisation

At what point should metformin be introduced in type 2 diabetes?

- Before prescribing metformin, encourage people with type 2 diabetes who have been recently diagnosed to make lifestyle changes, if they have not already done so.
- People who have already made lifestyle changes due to diagnosis of pre-diabetes but who went on to develop type 2 diabetes should be promptly started on metformin.

Should metformin be prescribed in people with pre-diabetes?

- Metformin is currently not licensed for use in pre-diabetes; however, studies have demonstrated it reduces progression to diabetes (Lily and Godwin, 2009).
- Use of metformin in prediabetes should be based on knowledge of the individual, family history, risks and individual choice.

Should a person with type 2 diabetes continue taking metformin if they are in remission?

- In true remission, people are off all diabetes medications; however, some may choose to continue taking metformin when their HbA_{1c} has dropped to remission levels. However, if they do so, they cannot be coded as being in remission.

How does an SGLT2 inhibitor affect symptoms of hyperglycaemia?

- SGLT2 inhibitors improve hyperglycaemia by reducing glucose reabsorption and lowering the renal threshold for glucose excretion (Mosley et al, 2015), leading to increased urination, thirst and weight loss.

Should SGLT2 inhibitors be used with a loop diuretic?

- The original restriction against using dapagliflozin alongside a loop diuretic has now been downgraded. However, all SGLT2 inhibitors should be used with caution with loop diuretics.

Which patients should not be prescribed an SGLT2 inhibitor?

- Renal transplant patients with renal insufficiency.

- Caution in people with lower eGFR: there are guidelines for both initiating and continuing SGLT2 inhibitors below an eGFR of 60 mL/min/1.73 m^2. There is a growing evidence base regarding renoprotection; therefore, the licence indications are changing rapidly. See the Summaries of Product Characteristics for each SGLT2 inhibitor for advice.
- Patients with an indwelling catheter (without a compelling reason; e.g. high risk of second stroke), as there is increased risk of thrush and urinary tract infection.

Which patients should not be prescribed a glucagon-like peptide-1 (GLP-1) receptor agonist?

- Frail older people should not be prescribed a GLP-1 receptor agonist as treatment can promote weight loss, which may exacerbate other problems.

When is it suitable to start a person with type 2 diabetes on insulin?

- Carefully consider the individual and their situation. Insulin may be started:
  - During illness.
  - If the person needs to take steroids.
  - If the person is symptomatic due to high blood glucose levels.
  - As a result of insulin insufficiency (these people tend to be of normal weight and need insulin earlier in their diabetes course).
  - If other treatments have failed.
- If a person appears to need insulin early after diagnosis due to failure of other treatments, review the diagnosis and consider the possibility of type 1 diabetes or monogenic diabetes.

Treatment individualisation and frailty

At what age should someone be considered an older adult?

- Treatment should be based on frailty status not chronological age. In England, every adult over the age of 70 should have an annual frailty assessment, per the Quality and Outcomes Framework (NHS England, 2019).

How can insulin be safely reduced in a person with type 2 diabetes, stage 3–4 kidney disease and an HbA_{1c} of 40 mmol/mol (5.8%)?

- Assess:
  - The reliability of the HbA_{1c} measurement.
  - Whether the person is in renal failure.
  - Whether they are insulin-insufficient or insulin-resistant.
  - Whether they have hypoglycaemia awareness.
  - The length of time they have been on insulin.
- If the HbA_{1c} is reliable and the person is hypoglycaemia-aware, reduce insulin in 20–30% increments to increase HbA_{1c} to a safe level.

In frail older adults, what is the HbA_{1c} threshold for diagnosis and what are the HbA_{1c} targets?

- Diabetes is diagnosed at HbA_{1c} 48 mmol/mol (6.5%), irrespective of age.
- There are three targets based on frailty (Strain et al, 2018):
  - Fit older adults (aged 70+): 58 mmol/mol (7.5%).
  - Moderately to severely frail adults: 64 mmol/mol (8.0%).
  - Very severely frail adults: 70 mmol/mol (8.6%).

Management during the COVID-19 pandemic

How should people's diabetes be managed when they have COVID-19?

- Sick day rules apply if there is a risk of dehydration (Down, 2020):
  - Consider pausing SGLT2 inhibitors and metformin.
  - Instigate blood glucose monitoring to assess the situation.
  - Implement insulin promptly if necessary.
- If presenting to hospital, insulin may required, often at very large doses, to control glycaemia. Early evidence is that insulin requirement drops over time but it is unclear whether it returns to normal levels in the longer term.

How can insulin be initiated during remote consultations?

- Have telephone/video link discussions prior to initiation, as the person needs to agree that insulin is the right medication for them.
- Send resources and video clips to the person in advance of the remote consultation on how to set the pen up and give an injection. Useful resources are available here:
  - Forum for Injection Technique.
  - Injection Technique Matters.
  - Pharmaceutical companies have video resources and links relating to use of their pens.
- Arrange a video link with the patient to answer any outstanding questions and talk them through their first injection. ■

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