



Basal insulin initiation: using best practice



Disclosures

- I have received payment for articles, presentations and involvement on advisory boards for all the major pharmaceutical companies who support diabetes



What will this session cover?

- Why do people with type 2 diabetes need insulin?
- Which insulins are used in a once-daily regimen?
- A brief description of the correct injection technique and equipment required
- What important things do people need to know when starting insulin therapy?



“Healthcare Professional warning”!

- This session is not intended to equip HCPs to start initiating insulin.
- The success of an individual using insulin depends on the confidence and competence of the person teaching them
- There are a number of insulin courses available:
 - MERIT supported by Novo Nordisk
 - TOPICAL supported by Lilly
 - PITSTOP www.pitstop.com

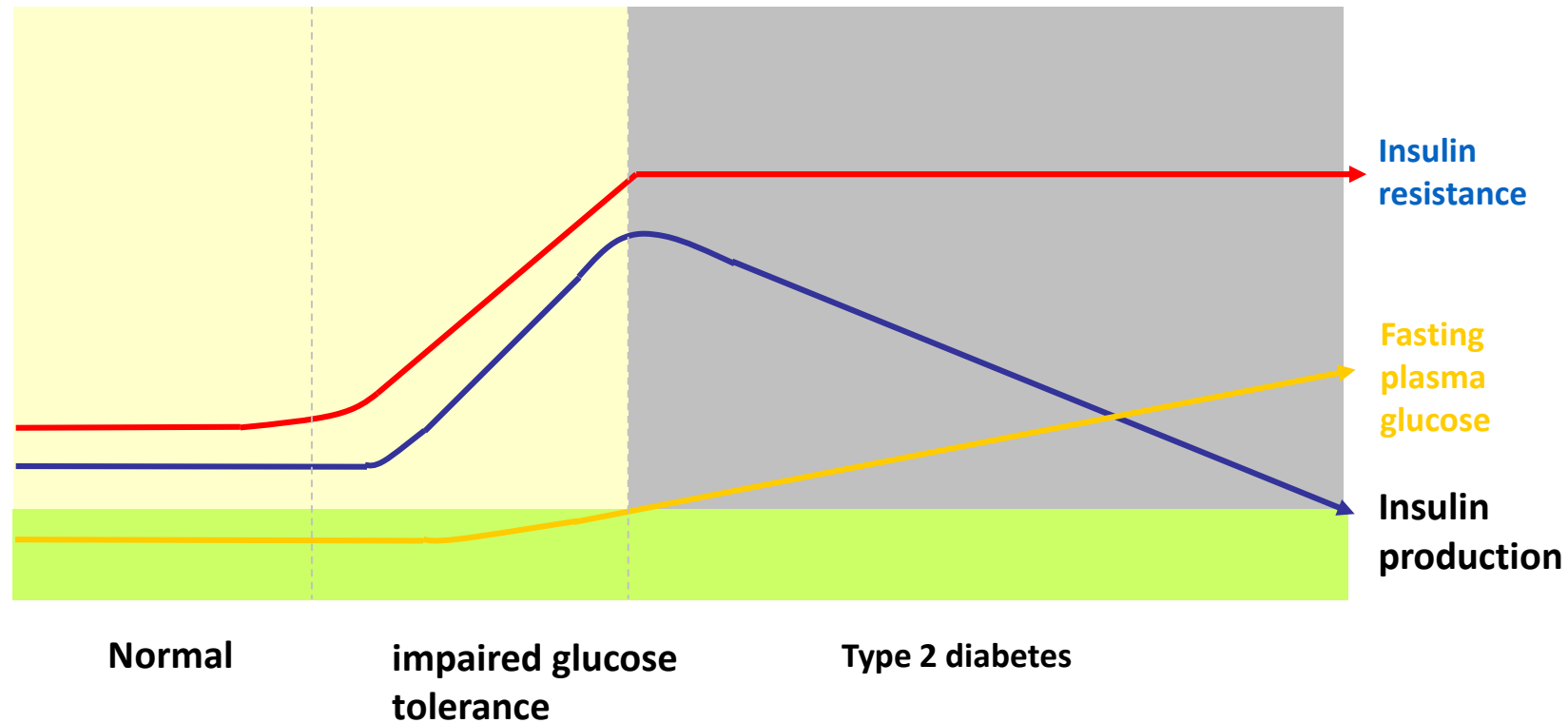


Challenges for Primary care when initiating insulin therapy

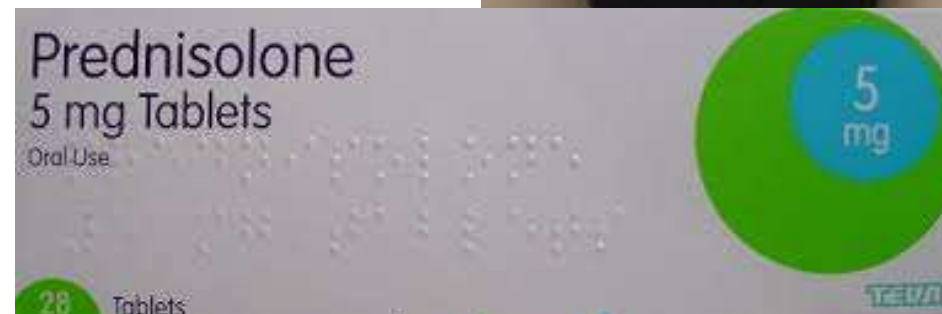
- Insufficient numbers in individual practices to maintain skills and knowledge
- Insufficient time to perform 1:1 and provide necessary education
- Insufficient skills and knowledge (DSNs had to learn)
- Secondary care models may not fit Primary care needs



Type 2 diabetes is progressive



Adapted from Bailey C. British Journal of Cardiology 2000;7(6):350–360
DeFronzo RA, Ferrannini E. Diabetes Care 1991;14(3):173–194



If all else fails...

- NICE type 2 guidelines (1.6.18)
- Rescue therapy at any phase of treatment:
 - “If an adult with type 2 diabetes is symptomatically hyperglycaemic, consider insulin or sulphonylurea”



Which insulin?

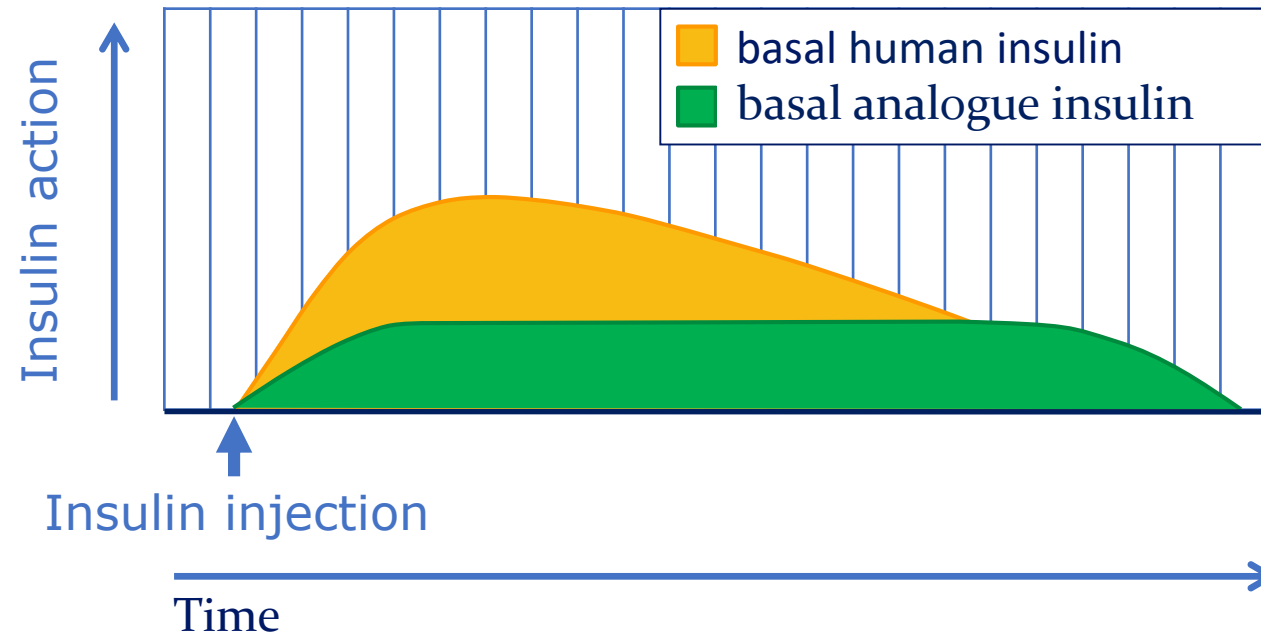
Insulins commonly used in a basal only regimen:

- NPH:
 - Insulatard
 - Humulin I
 - Insuman Basal
- Analogue:
 - Lantus
 - Levemir
- Biosimilars
 - Abasaglar
 - Semglee



Once-daily basal insulin

- Exact duration depends on the insulin
- Insulin analogues may provide up to 24-hour cover
- Intermediate human insulin preparations may only be active for ~8 hours and have a more pronounced peak activity



Why choose a basal regimen?

- Weight?
- Current medication?
- Adherence/person choice?
- Introducing a progressively more complex regimen
- Risk of hypoglycaemia a concern?
- Reliance on district nurse/others
- Regular eating pattern and carbohydrate portion size
- The individual's knowledge and understanding
- Any other considerations?



Benefits of a once-daily basal insulin regimen

- Requires only one injection per day
- May help overcome resistance to starting insulin injections
- Particularly useful when the individual's blood glucose is high overnight and in the morning
- Useful for individuals who require someone else (e.g., a district nurse) to administer their insulin
- May be associated with fewer side effects than other regimens¹

Limitations of once-daily basal insulin regimen

- Does not cover post-meal glucose surges so assumes the individual has sufficient endogenous insulin to cover these mealtime requirements
- Requires a regular consistent eating pattern with little variation in carbohydrate from one day to another



Drug treatments: Insulin therapy



1. Insulin-based treatment should be considered if metformin is contraindicated or not tolerated, and if dual therapy with two oral drugs has not continued to control HbA1c to below the person's individually agreed threshold for intensification
2. When starting insulin therapy in adults with type 2 diabetes:
 - Continue to offer metformin for people without contraindications or intolerance
 - Review the continued need for other blood glucose lowering therapies^a
3. In adults with type 2 diabetes, only offer a GLP-1 mimetic in combination with insulin with specialist care advice and ongoing support from a consultant-led multidisciplinary team^b

^aMedicines and Healthcare products Regulatory Agency (MHRA) guidance (2011) notes that cases of cardiac failure have been reported when pioglitazone was used in combination with insulin, especially in patients with risk factors for the development of cardiac failure. It advises that if the combination is used, people should be observed for signs and symptoms of heart failure, weight gain, and oedema. Pioglitazone should be discontinued if any deterioration in cardiac status occurs.

^bA consultant-led multidisciplinary team may include a wide range of staff based in primary, secondary and community care.
Type 2 diabetes in adults: management. NICE Clinical guideline update (NG28) 2015 [Accessed August 2019].

Starting insulin

- Discuss any fears or barriers
- Equipment (device, needle size)
- Correct injection technique (sites, rotation)
- Understand insulin action
- When to inject
- When to test blood glucose levels
- Dose: starting dose and the need for adjustment
- Lifestyle, lifestyle, lifestyle!



Important things the individual should know:

- Hypoglycaemia: symptoms and treatment
- Driving and insurance
- How to interpret blood glucose levels
- Appropriate dose adjustment
- What to do when unwell
- When to ask for help/ongoing support



LIFESTYLE





DIABETES: WHY DO I SOMETIMES FEEL SHAKY, DIZZY AND SWEATY? HYPOGLYCAEMIA EXPLAINED

➤ WHY IS THIS LEAFLET FOR YOU?

You have been prescribed a treatment which may cause hypoglycaemia. This leaflet will give you essential information on:

- What is a "hypo"?
- Symptoms
- Who gets a hypo?
- How do I treat my hypo?
- How do I avoid a hypo?
- Driving and hypos
- What else do I need to know?



The leaflet was developed by TREND UK in collaboration with MSD. This leaflet was initiated, funded and distributed by MSD.

DIAB-1243757-0012
Date of preparation: January 2018

LIFESTYLE





DIABETES: SAFE DRIVING AND THE DVLA

➤ WHY IS THIS LEAFLET FOR YOU?

Having diabetes does not mean that you need to give up driving. It does mean that you have a responsibility to inform certain organisations of your condition and plan before you drive or set off on a trip.

This leaflet will help you ensure that your driving is safe for yourself and other road users. It also includes information on:

- The law: Your responsibilities
- Do I need to notify the DVLA?
- Other circumstances
- What if I have an accident?
- Safe driving



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The leaflet cover has a white header with an orange diagonal banner on the left containing the word "MEDICATION" in white. The main image shows an insulin pen and a syringe on a blue textured surface. The title "KEEPING SAFE WITH INSULIN THERAPY" is in large white letters. The bottom section is purple with white text and a white box containing the NHS Improvement logo. A decorative border of colorful dots is at the very bottom.

MEDICATION

trend^{UK}

KEEPING SAFE WITH INSULIN THERAPY

➤ WHY IS THIS LEAFLET FOR YOU?

Insulin treatment improves the quality of life in many people and saves the lives of others. It is used to lower blood glucose levels. However, insulin management and prescribing errors are very common and can lead to patient harm. These are often as a result of not having

- The right insulin
- The right dose
- The right time
- The right device
- The right way

This leaflet can help you to get the most out of your insulin treatment and keep **YOU** safe

NHS
Improvement

Summary

- Device choice should determine insulin type
- Regimen should suit clinical need
- Changes to the insulin regimen may be needed as the condition progresses
- Education and support are crucial to achieve success
- www.trend-uk.org



