

Hypodermic insulin devices patients with type 2 diabetes

In addition to initiating patients on the appropriate and most cost-effective insulin consideration must also be given to the choice of hypodermic device. Prescribing data show that 7% of the total cost of prescribing for diabetes was spent on hypodermic devices equivalent to approximately £55 million nationally (ePACT March 2015). The PrescQIPP briefing document provides guidance for reviewing and switching patients on to a more cost-effective insulin device whilst adhering to NICE recommendations.

Key recommendations

- Use the least costly vial, cartridge or disposable pen available that is suitable for the individual patient.
- There are two needle lengths available with syringes, 8mm and 12mm. Where possible, the shorter needle should be used to prevent accidental intramuscular injection as this can lead to more erratic absorption.¹
- Where a pen device has been chosen, ensure the least costly pen device suitable for the individual patient and cartridge/vial is chosen. Autopen® 24 pen is currently the least costly reusable pen device.
- Use the least costly disposable needles that are the correct size for the individual patient and which are compatible with their insulin pen devices. There are several brands of needle available that currently cost less than £6 per 100 needles. Prescribe the most cost-effective choice compatible with the pen device the patient is using.
- Patients who have special visual or psychological needs should be provided with injection devices or needle-free systems that they can use independently for accurate dosing.
- Patients should be provided with suitable containers for the collection of used needles. Arrangements should be available for the suitable disposal of these containers.

National guidelines

NICE guidance on the management of type 2 diabetes states that a person who requires insulin should be offered education about using an injection device (usually a pen injector and cartridge or a disposable pen) that they and/or their carer find easy to use.¹ Appropriate local arrangements should also be in place for the disposal of sharps.

If a person has a manual or visual disability and requires insulin, a device or adaptation that takes into account individual needs and that the patient can use successfully.

Evidence base

A Drug and Therapeutics Bulletin review of insulins, regimens and devices in type 2 diabetes was published in December 2010.² The bulletin listed several considerations for choice of insulin devices in patients with type 2 diabetes and advantages and disadvantages of the various delivery methods.

Safety devices

Under the Health and safety Executive Regulations 2013³ employers must substitute traditional, unprotected medical sharps with a 'safer sharp' where it is reasonably practicable to do so. What this means in practice is that healthcare workers who are required to administer insulin (e.g. District Nurses) to patients especially outside of the clinical setting with no direct access to sharps bins must use 'safer sharps'.

Safer sharps are not required for use by patients who self-administer insulin.

Costs and savings available

There is a significant difference in costs of insulin delivery devices. Cost comparison charts are available in the full bulletin. Safety devices are significantly more expensive and should not be prescribed for patients self-administering insulin.

Currently, all needles are compatible with all devices with the exception of the NovoTwist® needles. These are currently only compatible with the FlexTouch®, FlexPen®, NovoPen® 4, NovoPen® 5 and NovoPen® Echo pens.

Switching to needles for pen injectors that cost less than £6 for 100 needles could save approximately £11.9 million annually across England. This equates to £20,883 per 100,000 patients (ePACT Jan 2015 - Mar 2015).

Any changes in device should be tailored to the individual needs of the patient.

References

1. NICE. Type 2 diabetes. The management of type 2 diabetes. NICE Clinical Guideline 87. Issued May 2009, Last modified July 2014. www.nice.org.uk
2. Which insulin, regimen and device in type 2 diabetes? Drug & Therapeutics Bulletin 2010; 48 (12): 134-8
3. Health and Safety (Sharp Instruments in Healthcare) Regulations 2013; Guidance for employers and employees. Published by the Health and Safety Executive <http://www.hse.gov.uk/pubns/hsis7.htm>

Contact help@prescqipp.info with any queries or comments related to the content of this document.

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Additional resources available:



Bulletin



Data pack

<http://www.prescqipp.info/resources/viewcategory/359-insulin-needles>