Needle fear and insulin self-injection

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Q: What can I do to support patients who are anxious about starting to give themselves insulin injections?

A: Injection-related fears are common in both adults and children and, as research has shown, are a key reason that individuals with diabetes avoid taking insulin. Addressing these fears is an important part of helping patients reduce their risk of diabetes-related complications. Research and our clinical experience suggest several strategies that can be helpful in supporting patients in learning to self-inject insulin.

An important first step in this process is directly asking patients about their feelings and concerns. Many patients may have fears about self-injecting but feel uncomfortable voicing them. They may have misconceptions about the size of the needle they will use, how painful the injections will be or the difficulty of learning to self-inject. Better understanding these concerns can help nurses tailor patient education.

When patients have fears, it is important to help them approach self-injecting in a gradual way. Learning the entire process at once can feel overwhelming; even looking at or holding the needle may be difficult for some patients. Instead, support patients in breaking the process down into small steps (e.g., gathering supplies, assembling the insulin pen) and practising each step until they are comfortable with it. Reinforce their progress as they master each step.

Helping patients manage their injection pain may help prevent the development of needle fears in the future. There are numerous strategies that can help reduce pain. Research shows using shorter needles (4-6 mm) and insulin pens instead of syringes reduce injection pain. Teaching patients correct technique, following established recommendations (e.g., regarding angle of insertion and rotation of injection sites) and reviewing technique regularly are also helpful. Patients can also be taught specific strategies for coping with injection pain, such as relaxation (e.g., deep breathing) and distraction.
techniques (e.g., counting while inserting the needle). Additional tips for managing needle pain can be found on the Canadian Psychological Association website (click on “Psychology Works” Fact Sheets, under Public, at cpa.ca).

There are also unique considerations for supporting self-injection in children. It is important to assess each child’s readiness for self-injecting, as children develop at different rates and may be ready for self-injection at different chronological ages. Those who are not ready to self-inject can take responsibility for aspects of the injection process (e.g., gathering supplies, preparing insulin pen with supervision) to support working up to injecting on their own in the future.

Parents play an important role in managing children’s injection-related pain and fear. Supporting parents in managing their own anxiety about injections can help them support their children, and parents can help children manage their pain by coaching them to use the coping skills we have described.

While many people have some anxiety about injections, some experience severe anxiety that results in significant distress and impairment in their functioning. This is commonly referred to as needle phobia and is a form of the blood-injection-injury subtype of specific phobia. Individuals with needle phobia will likely require additional support, beyond the strategies described in this article, to learn to self-inject insulin. Referral to a psychologist for cognitive behavioural therapy can help patients examine their thoughts and feelings about needles and complete graded exposure therapy to work up to self-injecting.

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