

Improving Patient Acceptance of Insulin Therapy by Improving Needle Design

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Abstract

Improved needle designs could increase patient compliance with insulin therapy. In this issue of *Journal of Diabetes Science and Technology*, Hirsch and colleagues assessed patient pain and preference for a 5-bevel needle design among diabetes patients. A blinded comparison with traditional 3-bevel needles yielded no significant difference, but patients preferred the 5-bevel needle in unblinded home injection and clinical insertion studies. This suggests that important subjective/contextual factors contribute to preference in conjunction with the fundamental needle design change. While 5-bevel needles may increase patient acceptance, more dramatic changes of needle design, such as microneedles, could enable still greater patient acceptance through reduced pain as well as improved insulin pharmacokinetics.

J Diabetes Sci Technol 2012;6(2):336-338

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Keywords: bevel, hypodermic needle, insulin injection, microneedle, pain, patient preference

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