Analysis of the Injection Force of Solostar® Compared with Other Disposable Insulin Pen Devices at Constant Volume Flow Rates

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Abstract

Insulin pen devices have greatly enhanced the portability and accessibility to insulin therapy for millions of people with diabetes. Comparison research data should be reviewed thoroughly.

In this issue of Journal of Diabetes Science and Technology, the study presented by Thomas van der Burg is balanced in number of samples tested, same tensile meter, and identical units per second delivery rate into an open beaker. Mean plateau force of SoloSTAR® and KwikPen™ were significantly lower. KwikPen and SoloSTAR utilized 5-mm length 31-gauge (G) needles vs 6-mm 31G needles for FlexPen® and Next Generation FlexPen®, perhaps skewing results in favor of shorter needles instead of device design.

Individual understanding of correct insulin use, appropriate self-monitoring of blood glucose, vision and dexterity capability, and affordability of therapy must be considered first. SoloSTAR holds one unique market advantage, delivery of up to 80 units of insulin per injection.