

Realizing Pain-Free Injections



i-JECT **ST**

Pain-Free Digital Automatic Syringe



i-JECT VIDEO



i-JECT ST Review

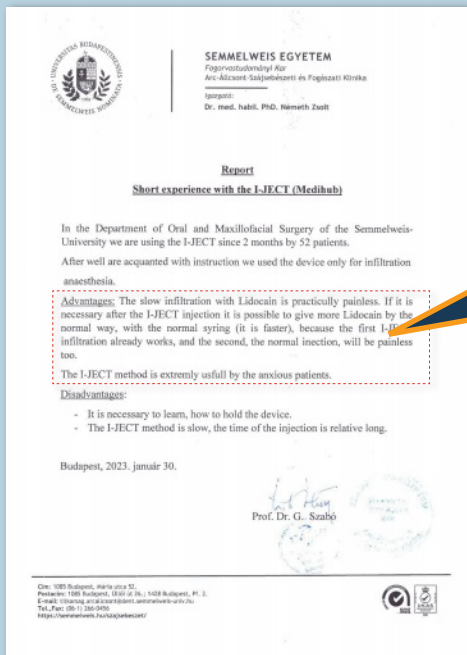
Realizing Pain-Free Injections

i-JECT method is extremely useful to ease anxiety of patients



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Summary from the usage report written by Dr. Szabo at Semmelweis University

- Used i-JECT to 52 patients over the period of two months
- **The slow infiltration of lidocaine using the i-JECT is practically painless**
- After i-JECT infiltration, it is possible to give more lidocaine, if necessary, to make the process painless
- Therefore, the i-JECT method is **extremely useful to ease anxiety of patients**

Digital automatic anesthesia syringe for doctors and patients

Power button

Injection start / speed adjustment button
(P ~ 3 step speed)

Volume adjustment button (Q'ty)
(25, 50, 75, 100%)

Ampoule cap 360 degree rotation
(bidirectional rotation / push lock function)

One-touch ampoule cap separation button

ASP/II Button
Aspiration, stop and reset



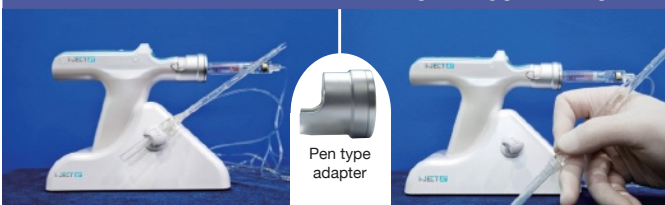
i-JECT App

Aspiration function



Performing an aspiration function to prevent the injection of a needle into the vessel during anesthesia transfer(When the ASP button is operated, the drug flows back and blood in flow can be checked).

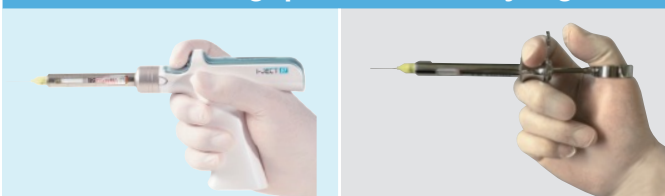
'i-JECT ST' assembled with pen type adapter



Pen on the cradle

Pen grip

85% Similar grip with manual syringe



Picture of i-JECT ST grip

Manual syringe grip

Sterilizable metal ampoule cap (Stainless steel) is provided as standard to reduce the cost of consumables



Metal ampoule cap provided
(2EA : Sterilizable)



Contra ampoule cap
(Sterilizable / Option)



Plastic ampoule cap
(Disposable / Option)



Convenient battery removal
(2 batteries included)



Plastic i-JECT ST cover
Prevent contamination
(1Box : 300EA)

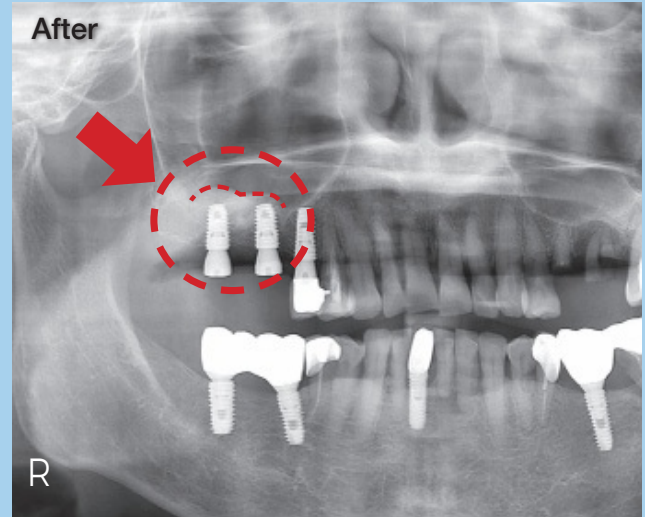
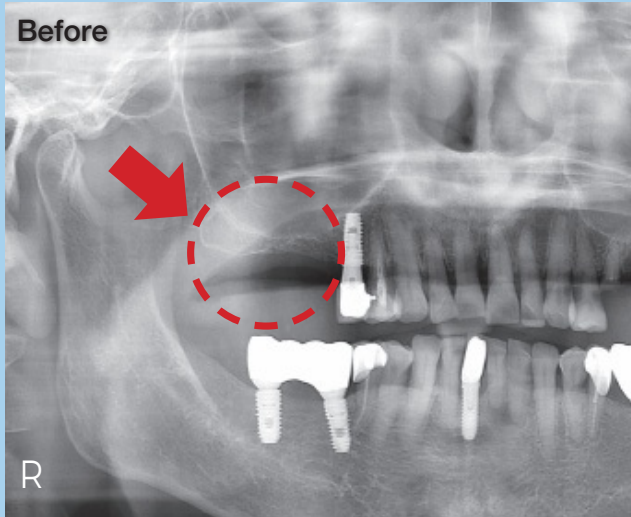
i-JECT DSA kit

DSA(Digital Sinus Approach)

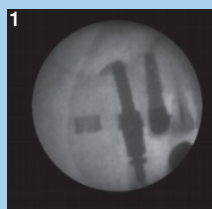
Safety Precise and constant speed saline injection: safely perform hydraulic lift without damage to maxillary sinus membrane.

Convenience Button press saline injection is easier than manual lift and separation using several hand instruments.

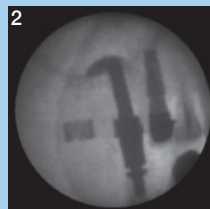
DSA clinical treatment using i-JECT ST (Digital Sinus Approach)



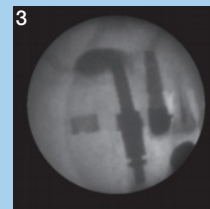
▲ DSA kit Usage Protocol



1 DSA kit surgical procedure sinus lift starts in 10 seconds (i-JECT ST injection speed: 2 stage)



40 seconds later



50 seconds later perfect maxillary sinus hydraulic lift with DSA kit

Total injection time about 90 seconds

DSA kit Usage Protocol (Non surgical guide type)

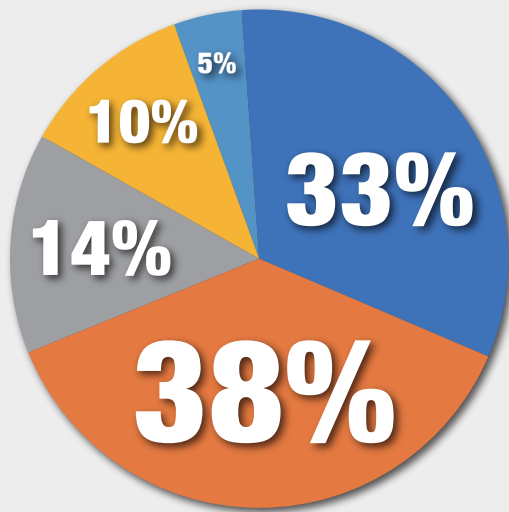
Stage 1	Using Crestal Approach Kit to access 1mm short from the floor of sinus.
Stage 2	Open the sinus floor with 50rpm water tap(DSA kit).
Stage 3	Connect silicone tube to water tap. Make sure that the silicone tube is filled with saline solution.
Stage 4	Press the start button and inject saline solution at 2 speed stage.
Stage 5	Approximately 3ml of saline injection completes maxillary membrane lift(about 90 seconds).

DSA kit Components



▲ Clinical Procedure Video

Reasons of Fear from Dentists

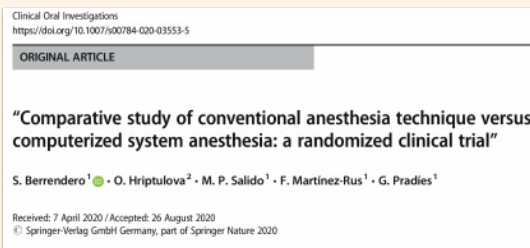


- Pain 33%
- Injection 38%
- Fear of extraction 14%
- Sensorial discomfort 10%
- Fear of unknown 5%

Patients often fear pain caused by anesthetic injections more than pain from dental treatment itself.

Kwak EJ, Pang NS, Cho JH, Jung BY, Kim KD, Park W. Computer-controlled local anesthetic delivery for painless anesthesia: a literature review. *J Dent Anesth Pain Med.* 2016 Jun;16(2):81-88.

92.5% of Patients Prefer Digital Syringes



“The level of pain patients experience from the digital anesthesia was found to be **much lower** than that from the conventional anesthesia, with statistical significance. ~92.5% of patients preferred anesthesia performed with a digital syringe, compared with conventional anesthesia.”

(Berrendero et al., 2020)

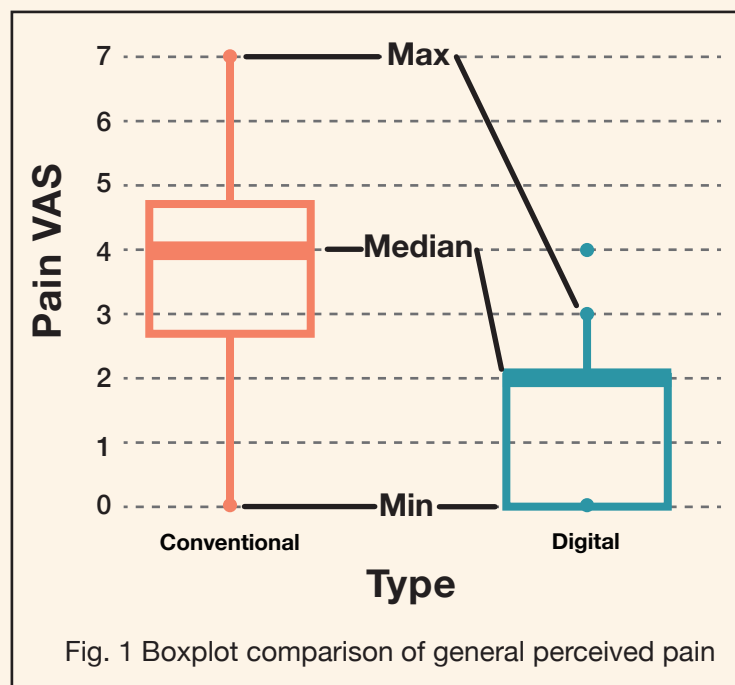


Fig. 1 Boxplot comparison of general perceived pain

Berrendero, S., Hriptulova, O., Salido, M. P., Martínez-Rus, F., & Pradies, G. (2020). “Comparative study of conventional anesthesia technique versus computerized system anesthesia: a randomized clinical trial.” *Clinical Oral Investigations*, 25(4), 2307–2315. <https://doi.org/10.1007/s00784-020-03553-5>

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i-JECT *ST*
Pain-Free Digital Automatic Syringe

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