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Abstract 2, Table 4. Drug therapy before starting autogenic training

Case No.	NSAIDs	Antianxiety Agents	Antidepressants	Kanpo Medicines	Others
1	diclofenac sodium	diazepam	—	—	—
2	loxoprofen sodium	diazepam	setiptiline maleate	keishi-ka-jutsubu-to kakkon-to	—
3	loxoprofen sodium	—	—	—	—
4	—	alprazolam	maprotiline hydrochloride	—	—
5	loxoprofen sodium	tandospirone citrate triazolam	setiptiline maleate maleate	keishi-ka-jutsubu-to	—
6	tofisopam	tandospirone citrate	—	gorei-san keishi-ka-jutsubu-to	adenosine triphosphate disodium, vitamin B complex, artificial saliva
7	—	alprazolam triazolam	setiptiline maleate hydrochloride	amitriptyline ohren-to	—
8	—	diazepam triazolam	maprotiline hydrochloride	—	—

Many kinds of drugs were prescribed for these patients before starting autogenic training.

Seven cases mastered higher formulas than the first one and obtained both mental and physical stability. One case gave up the autogenic training, because she could not master the second formula and requested immediate pain relief. Anxiety and pain were reduced in four cases and only anxiety was reduced in three (Table 5). Kanpo and acupuncture therapy were halted in these seven cases (Table 6). Moreover, drug therapy was discontinued or the number of drugs was decreased in these cases (Table 7). They could continue their autogenic training for a long period because they were easily influenced by suggestion, willing to be treated, sincere, and tenacious. It is concluded that autogenic training is useful for relieving psychogenic intractable oral and maxillofacial pain.

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3. The Shape of Local Anesthetic Injection Syringes with Less Discomfort and Anxiety—Evaluation of Discomfort and Anxiety Caused by Various Types of Local Anesthetic Injection Syringes in High Level Trait-Anxiety People

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Sometimes the anxiety and pain from local anesthetic injection trigger abnormal conditions such as neurogen-

Abstract 2, Table 5. Effects of autogenic training

Case No.	Formula	No. of Times	Result
1	V abdominal warmth	59	++
2	VI cooling of the forehead	46	++
3	IV respiration	24	+
4	II warmth	12	+
5	I heaviness	13	-
6	IV respiration	22	+
7	VI cooling of the forehead	56	++
8	VI cooling of the forehead	73	++

++: anxiety and pain were relieved; +: anxiety was relieved; -: no effect.

Autogenic training of No. 5 was stopped, because this patient did not want it. The other cases succeeded in the mastering the autogenic training and had some positive effects as shown above.

Abstract 2, Table 6. Treatments after mastering or giving up autogenic training

Case No.	Brief Psychotherapy	Drug Therapy	Kanpo Therapy	Acupuncture Therapy	Music Therapy	Autogenic Training
1	o	o	—	—	o	o
2	o	—	—	—	o	o
3	o	o	—	—	—	—
4	o	—	—	—	—	o
5	o	o	o	o	o	—
6	o	—	—	—	o	o
7	o	o	—	—	—	o
8	o	o	—	—	—	o

After mastering autogenic training, all the patients except No. 5 could stop kanpo therapy and acupuncture therapy. Drug therapy was stopped in three of them. Music therapy was added in No. 2 after the evaluation of autogenic training. After giving up autogenic training, No. 5 started to receive music therapy with all the other treatments.

Abstract 2, Table 7. Drug therapy after mastering or giving up autogenic training

Case No.	NSAIDs	Antianxiety Agent	Antidepressants	Kanpo Medicines	Others
1	diclofenac sodium	—	—	—	—
2	—	—	—	—	—
3	loxoprofen sodium	—	—	—	—
4	—	—	—	—	—
5	loxoprofen sodium	tandospirone citrate triazolam	setiptiline maleate fluvoxamine maleate	keishi-ka-jutsu-to	—
6	—	—	—	—	—
7	—	triazolam	—	—	—
8	—	triazolam	—	—	—

The number of drugs which were used mastering autogenic training was decreased for each successful patient.

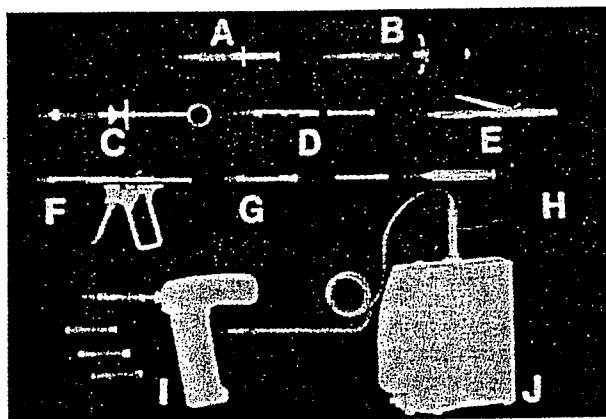
ic shock and hypertension. We evaluated and compared levels of discomfort and anxiety to discern a visually comfortable injection syringe for dental patients, including those with dental phobia.

Most dental phobic patients show a high level of trait-anxiety when tested using STAI valuation bases. The subjects used in this study were volunteers who had high levels of trait-anxiety using the STAI valuation bases. We showed them 10 types of injection syringes complete with needles and then evaluated their discomfort and anxiety levels (Table 1). The injection syringes were the following: (A) disposable syringe (semitransparent), (B) glass syringe (clear/blue), (C) cartridge syringe (sheen), (D) cartridge syringe (mat/black), (E) pen type (blue/mat), (F) pistol type (sheen), (G) pistol type (mat/black), (H) disposable cartridge syringe (semitransparent), (I) electric pistol type (milky white), (J) separate type (Wand® drive unit: milky white/handpiece and cartridge holder: semitransparent). The Wand® precision-metered injection system consists of a computerized drive unit with plunger, air-activated foot pedal, and disposable handpiece that houses the anesthetic cartridge and nee-

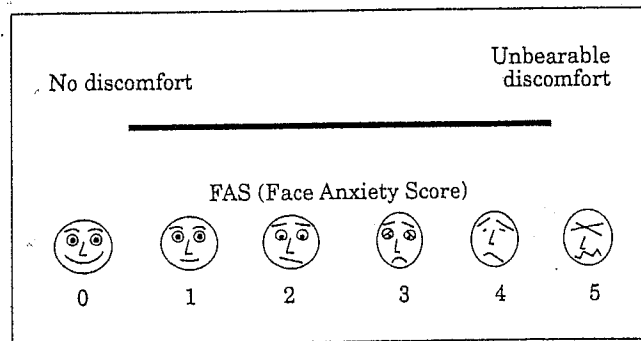
dle. Discomfort was evaluated by VAS (100 point scale, 100 mm width. Points 0: No discomfort ~100: Unbearable discomfort). State-anxiety was evaluated by FAS (6 grade estimates, minimum score 0 and maximum score 5) (Figure 1). FAS scores of 2 and higher are equivalent to high levels of state-anxiety in STAI valuation bases. The data were presented as mean ± SE. Statistical analysis was performed with Wilcoxon signed-rank test. A P-value of less than 0.05 was considered significant.

The results show that the electric pistol type syringe (I) induced the highest VAS points (56.1 ± 8.3); the lowest was the separate type syringe (J) (26.4 ± 7.4). The highest FAS score was the electric pistol type with 2.67 ± 0.39 (I), followed by the mat and the sheen pistols type (G and F) with 2.36 ± 0.34, 0.37. The lowest score in FAS was the separate type (J) (1.31 ± 0.37) (Tables 2 and 3).

In conclusion, it was suggested that dental phobic patients feel discomfort and experience a high state-anxiety from seeing the pistol type injection syringe, but the separate type syringe curbs the surge of discomfort and anxiety for them. The results also suggested that the



Abstract 3, Figure 1. Injection syringes
We let the subjects see each injection syringe with needle, one at a time in alphabetical order from A to J, and then evaluated their discomfort and anxiety levels.



Abstract 3, Figure 2. VAS and FAS
Discomfort was evaluated by VAS (100 point scale, 100 mm width. Points 0~100, left to right). State-Anxiety was evaluated by FAS (6 grade estimates, minimum score 0 and maximum score 5).

Abstract 3, Table 1. Injection syringes

	Syringe Type	Color	Size (mm):	Syringe Name
			Length × Width × Depth	
A	disposable syringe	semitransparent	108.3 × 24.9 × 10.7	TERUMO syringe®
B	glass syringe	clear/blue	167 × 51.6 × 11.3	dental glass
C	cartridge syringe	sheen	237 × 33.9 × 12	Henke-Dent® 2000 SA
D	cartridge syringe	mat/black	178.2 × 54 × 11	Self Aspirating Syringe®, anthogyr
E	pen type	blue/mat	155.4 × 31.4 × 25.6	CITOJECT®
F	pistol type	sheen	198.7 × 99 × 13	Henke-Ject®
G	pistol type	mat/black	198.1 × 98.4 × 11.1	ERGOJECT®, anthogyr
H	disposable cartridge	semitransparent	257.2 × 50.3 × 11	Safety plus®
I	electric pistol type	milky white	213.7 × 158 × 30.3	New Cartry-Ace®
J	separate type (needle and body)	milky white semitransparent	unit: 178 × 54 × 159 handpiece: 155 × 5~10	Wand®

We let the subjects see each injection syringe with needle, one at a time in alphabetical order from A to J, and then evaluated their discomfort and anxiety levels.

smaller the size of the syringe visible to the patient, the less discomfort and anxiety.

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4. Propofol does not Change the Platelet Retention Rate

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An acceleration of platelet aggregations during and after surgery increases the risks of perioperative myocardial or cerebral infarction. It has been reported that isoflurane and sevoflurane depress platelet aggregation, but there are no convincing reports about the effects of propofol. We therefore investigated the effect of propofol on platelet aggregation by determining the platelet retention rate (PRR):

Twenty-six consenting oral surgical patients classified in ASA physical status I were randomly assigned to one

of two groups (GOS group: $n = 13$; GOP group: $n = 13$). The patients in the GOS group were induced with thiopental sodium, nasotracheally intubated with vecuronium bromide, and maintained with 60% nitrous oxide and 1.5% sevoflurane in oxygen. The patients in the GOP group were induced with propofol, nasotracheally intubated with vecuronium bromide, and maintained with 60% nitrous oxide and 10 mg/kg/h propofol in oxygen. The PRR was determined by the collagen bead column method. Venous blood was collected three times in each group for the determination of PRR. The first PRR was measured before the induction of anesthesia, the second PRR, after the induction of anesthesia, and the third PRR 5 min after submucosal injection of 5 ml of 1% lidocaine solution containing epinephrine (1:100,000). Data were analyzed using one-way ANOVA for repeated measurements followed by Student Newman-Keuls test for intragroup comparisons and Student's *t* test for unpaired samples for intergroup comparisons. *P* values less than 0.05 indicated statistical significance.

The PRR in the GOS group decreased after induction

Abstract 3, Table 2. VAS-Discomfort (in order by score)†

1	I (electric pistol type)	56.1 ± 8.3
2	B (glass syringe)	50.9 ± 6.6
3	F (pistol type, sheen)	50.8 ± 7.2
4	G (pistol type, mat/black)	50.6 ± 7.4
5	C (cartridge syringe, sheen)	47.2 ± 6.8
6	D (cartridge syringe, mat/black)	45.2 ± 5.6
7	H (disposable cartridge)	43.9 ± 6.0
8	A (disposable syringe)	34.1 ± 6.9*
9	E (pen type)	31.4 ± 6.9*
10	J (separate type)	26.4 ± 7.4*†

Data are mean ± SE ($n = 16$).

* $p < 0.05$ vs I,

† $p < 0.05$ vs-C, Wilcoxon signed-rank test.

Abstract 3, Table 3. FAS (in order by score)

1	I (electric pistol type)	2.67 ± 0.39
2	G (pistol type, mat/black)	2.36 ± 0.34
3	F (pistol type, sheen)	2.36 ± 0.37
4	C (cartridge syringe, sheen)	2.14 ± 0.38
5	H (disposable cartridge)	2.07 ± 0.28
6	B (glass syringe)	2.07 ± 0.33
7	D (cartridge syringe, mat/black)	1.93 ± 0.34
8	A (disposable syringe)	1.53 ± 0.32*
9	E (pen type)	1.36 ± 0.36*
10	J (separate type)	1.31 ± 0.37*

Data are mean ± SE ($n = 16$; J, $n = 15$; A · B · H · I, $n = 14$; C · D · E · F · G).

* $p < 0.05$ vs I, Wilcoxon signed-rank test.