

ER training Robot
Pedia-Roid



DENTAROID

A dental patient simulator developed for clinical practice and training, intended for dental students. Featuring voice recognition, this robot can open its mouth according to the doctor's instructions, changing the direction of its face, and perform actions such as unexpected movements and coughing. It can also realistically reproduce complex actions, such as jaw closing and vomiting reflex.

DETAIL

Functions:

- Full body model: 157cm (or approx. 5.15ft)
- Skin uses soft special resin, silicone elastic material for soft tissues such as the tongue.
- Eyelids, eyeballs, jaw, tongue, neck, hands, pulse, chest (breathing): a total of 12 motions.
- Voice recognition function

Movements:

- Blinking, eyeball, tongue movements (physiological phenomena)
- Unexpected head swing when pain is felt
- Sneezing, coughing (suffocation)
- Hand movements
- Change in pulse
- Change in respiration pattern



We Are Here For Your Health

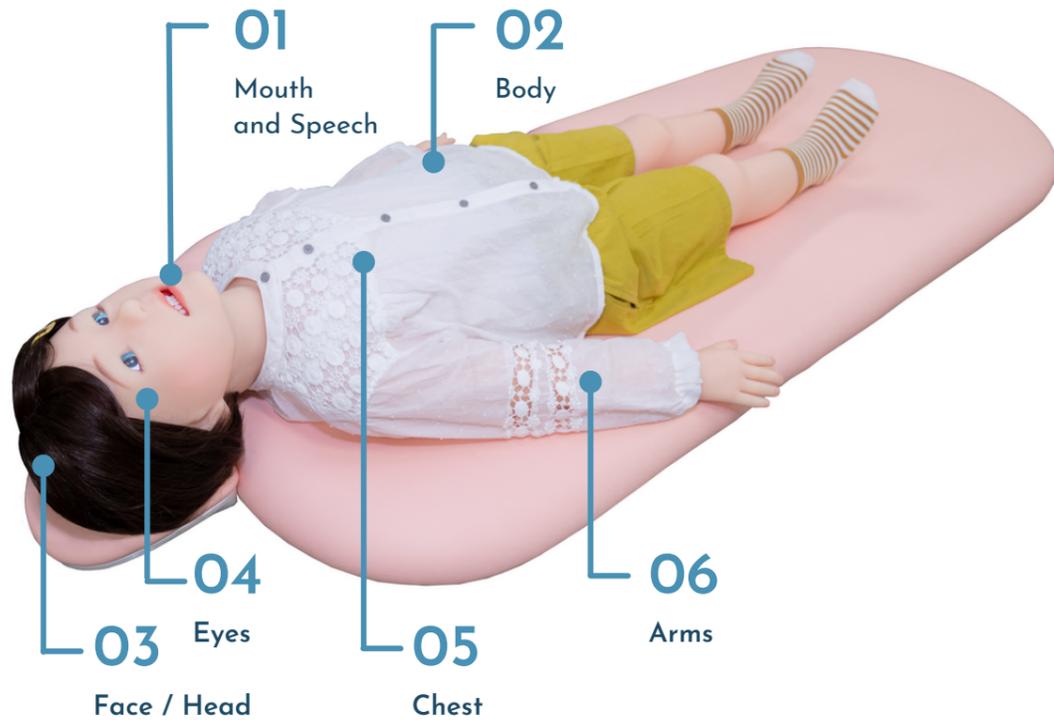


ER training Robot

Pedia_Roid

Pedia_Roid is a pediatric patient-type robot that can realistically simulate the jittery movements of a child who is reluctant to receive treatment, or a sudden change in medical condition. It was developed in response to the fact that there are few opportunities for clinical training for children in the field of medical education. It can reproduce in detail the expression of emotions such as anxiety, fear and resistance, changes in facial color, pupils, and breathing sounds. In addition to dental treatment, the system can be used for training in various fields of pediatric medicine, including emergency care.

*patent pending



01 Mouth and Speech

- Greetings, and Emotional expressions (feeling pain, crying, etc.)
- Mouth movements (opening and closing, sneezing, coughing, vomiting reflex)
- Tongue movements (back and forth, left and right)

Point

It is possible to cut teeth, and replace them one by one. It has a speech function for conversations (Language available in Japanese, Chinese, and English).

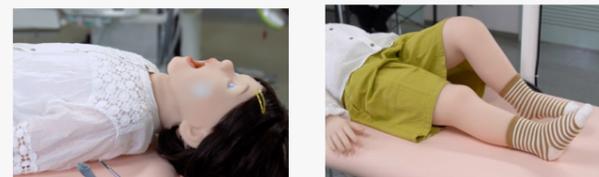


02 Body

- Body movements (writhing, flapping both arms and legs).
- Convulsions (tonic spasms, clonic spasms).
- Exhausted (whole body).

Point

You can hold down the rampant limbs and perform therapeutic training closer to practice.



03 Face / Head

- Change in facial color (pallor, flushing).
- Changes in facial expression (reluctance).
- Head movement (up and down, left and right).



04 Eyes

- Eye movement (up and down, left and right).
- Opening and closing of the eyelids.
- Pupil Movement (mydriasis, constriction, counter-reflex).



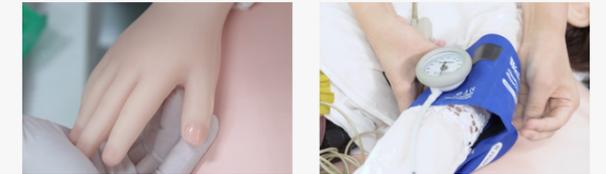
05 Chest

- "Up and down" movements in response to breathing, breath sounds (e.g., wheezing).
- Labored breathing (depressed breathing), auscultation of lung sounds.
- CPR (chest compressions), auscultation of heart sounds.



06 Arms

- Blood collection (intravenous injection from the back of the hand).
- CRT (capillary refill test). Pulse sensing.
- Measurement of blood pressure and blood oxygen saturation (monitor display).



SPEC

Product name	Pedia_Roid
Size	Height: 110 cm Weight: 23 Kg Full body model (assuming age 5-6 years)
Material	Silicon
Degrees of freedom	Head, Mouth, Tongue, Eyelids, Eyes, Pupils, Arms, Legs, Pulse, Chest. Total: 24 degrees of freedom
Movements	Whole body movement to avoid dental treatments. Unexpected shaking of the head, sneezing, coughing, and vomiting in anticipation of pain.
Other	Various systemic state changes during treatment (pulse, respiration, complexion). Conversation (speech) In the mouth, a model of the teeth can be cut. Intravenous injection (blood collection) is possible on the back of the hand, CPR (chest compressions), and CRT (capillary refill test) are also possible.
Operation method	Wireless operation from PC or tablet.

[Overseas Sales]
Nissin Dental Products Inc.
<https://www.nissin-dental.net/>



[Maker]
tmsuk company limited
<https://www.tmsuk.co.jp/en/>



[Saudi Arabia Sales]
Samir Trading & Marketing
<http://www.samirgroup.com/>



[Japan Sales]
J.MORITA CORPORATION LTD
<https://www.dental-plaza.com/>

