Faster voice recovery

SINGAPORE: Singaporean scientists have designed a new system to help patients who have undergone larynx removal to speak again in a single surgery. In comparison with existing methods, their invention not only reduces the number of surgical steps but also increases accuracy of placement of a voice prosthesis and allows for immediate voicing.

Conventionally, various surgical steps are involved in the insertion of a voice prosthesis. Doctors need to make the first incision between the trachea and the oesophagus, while, at the same time, a guide-wire is inserted into the fistula to prevent the creation of a false passage. Two dilators are then inserted to widen the fistula.

Previously, a temporary rubber tube was placed into the fistula and the voice prosthesis was inserted about two weeks later, explained the researchers. They think, however, that their newly developed technique can reduce the time needed to restore the patient’s ability to speak to ten minutes after the initial procedure. It offers a one-step solution, reducing the complexity of the surgery and saving patients discomfort and money, said Dr David Lau, the project’s consultant ENT surgeon at Raffles Hospital in Singapore.

“Our intent now, good sizing of the prosthesis was achieved through trial and error,” said Dr Chui Chee Kong, project leader and assistant professor at the at the National University of Singapore’s Department of Medical Engineering. “We intend to mirror all the steps in a single procedure. Our system ensures an immediate snug fit of the prosthesis in the passageway created between the trachea and the oesophagus.”

Owing to tissue change and wear, voice prostheses need to be changed, which entails fitting them each time. “Our invention offers patients a more fuss-free system, reducing time and discomfort,” added Ching Chin Boon, a research engineer at the university.

In laboratory tests, the researchers replicated both conditions, which are the result of inflammatory responses in the body, by inducing gum disease and arthritis in mice. They found that animals with gum disease developed significantly worse arthritis. In addition, they observed signs of bone loss in the jaws of mice with arthritis alone and signs of bone loss in the joints of mice with gum disease alone. The researchers are now testing whether treating periodontal disease could also help to reduce the symptoms associated with arthritis by researching histone deacetylase inhibitors.

Cases of seppuku are reportedly increasing in Japan

Evaluate the dental workforce system

Last year, the Indonesian government announced legislation to stop dental technicians from performing dental treatment. This regulation was originally planned to come into force six months later in order to give the government time to implement short- and long-term planning and to reach consensus among all stakeholders on this issue.

The first law on dental technicians, introduced in 1969, legalised this profession and issued them with the authority to provide patients with removable full and partial acrylic dentures only. This regulation, however, was never really enforced for unknown reasons. Therefore, it has become common for dental technicians to also place fillings, fabricate and place fixed dentures, and perform orthodontic treatment and even extractions without the necessary education. As a result, no new registrations of dental technicians have been permitted since 1989.

Although political stakeholders still argue over the real cause of the dental health crisis in Indonesia, it might be the result of a complex interrelation of factors. Socio-economic disparity has created an imbalance in accessing dental care, resulting in services that are focused on income rather than actual need. The costs of dental treatments have exploded owing to the absence of pricing regulations, forcing disadvantaged parts of the population to rely on dental technicians to maintain their stomatognathic function, and resulting in often illegal practices. Recent reports have also described the high, unmet demand for and persistent inequality in dental care in Indonesia owing to the dental workforce shortage, as well as geographical and economic barriers. A lack of commitment to preventive community-based dental health promotion might also be a factor. Prevention is still very far from being appreciated. Needless to say, investment in prevention is still rare in this country.

The Indonesian government has demonstrated its willingness to improve the nation’s dental health by committing itself to the establishment of a universal health-care coverage system. However, it is also time to evaluate the dental workforce system and start distinguishing clearly between the authorised roles of dentists, hygienists and dental technicians. Moreover, resisting globalisation is like defying the law of gravity; therefore, increasing the quality and quantity of the dental workforce based on need is necessary for competing in the global market.

Dentists take part in military-led aid mission to Asia Pacific

International humanitarian campaign aims to provide treatment for more than 20,000 people

WASHINGTON, DC, & SAN DIEGO, CA, USA: In one of the worst natural disasters in recent times, the Boxing Day tsunami killed more than 200,000 people in South-East Asia. Following calls from governments and chari- ot organisations such as the San Diego Pre-Dental Society and intended to enhance international cooperation, as well as regional capability for future emergency response. Several countries, including France, Singapore and South Korea, are participating for the first time, he said. Besides the US, Canada, Japan, New Zealand and Australia have contributed resources regularly since the beginning.

The last mission in 2011 provided treatment to more than 21,000 patients.

The Partnership is hosted by the US Navy, which also provides major transportation and logistic support through the USNS Mercy, one of its two currently operating hospital ships. According to Captain Morgan, it will offer capacity for between 100 to 150 surgeries per day offshore and on land.

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