Recently, the Department of Burns and Plastic Surgery of Xi’an Central Hospital received a patient who suffered from scar contracture deformity of the neck having suffered burns, along with dysfunction.

Cicatrectomy and lysis on the neck under general anesthesia was planned to be performed on November 16. Preoperative airway assessment: severe chin-neck adhesion, head hypokinesis at 0 degrees, thyromental distance of 0, and mouth opening of 2 cm, this patient had a rare problematic airway. If the tracheal intubation failed and an unobstructed airway was not available, it would not be possible to perform the operation, with the patient’s life being threatened, and anesthesia was at high risk.

Before the operation, the Department of Anesthesiology discussed and prepared the optimum anesthesia protocol. The final decision was to use the new technology of a tracheal intubating laryngeal mask (Cookgas Intubating Laryngeal Airway, CILA) to solve the ventilation problem.

On November 16, at 08:00, after the patient entered the operating room, venous access was established and the patient was connected to the monitor. The operation was performed by Xiaogang Cui (Chief physician). First, a small amount of analgesic anaesthetic was given, and then a size 3.5 CILA was inserted via the mouth under autonomous respiration conditions.
When the appropriate position was confirmed, further anesthesia was administered and the operation proceeded as follows: the body of the fiber optic bronchoscope (FOB) was sheathed with a 6.5 mm ET tube; the ET tube was inserted into the trachea (the ET tube passed through the opening of the laryngeal mask airway via CILA and reached the glottis, then entered into the trachea via the glottis); the FOB was then removed; the patient was connected to a ventilator and the PETCO2 was monitored (showing successful tracheal intubation); the CILA was removed with the assistance of a dedicated CILA-removal stylet system; the ET tube was then fixed and successful anesthesia was achieved. When the operation was finished, the ET tube was removed. Post-operative follow-up suggested that the patient did not feel any discomfort.

Maintaining an unobstructed airway and performing tracheal intubation of the patient with severe chin-neck adhesion are often big challenges to the anesthetists. CILA is a new device, with the advantages of easy operation, high success rate of guiding intubation and so on. Furthermore, with the CILA an ordinary ET tube can be used directly to perform intubation. FOB-guided intubation technology is one of the most common and effective methods to solve the problem of difficult intubation at present. The combined application of the CILA and FOB-guided intubation technology not only solves ventilation problems in the management of difficult airways, but also improves the success rate of intubation in difficult airways. Such a combined application has the advantages such as easy operation, high success rate of intubation and minor cardiovascular response, providing a new solution for tracheal intubation in difficult airways.

Apparently such technology is only being applied in a few hospitals such as the teaching hospitals of The Fourth Military Medical University and Xi’an Jiaotong University, and this is the first time it was performed in a municipal hospital. The use of the new technology of CILA indicates that the Department of Anesthesia of our hospital has achieved a new level in managing difficult airways.

（麻醉科供稿）(By Department of Anesthesia)