

# Initial Impressions Of a New Airway Device – The TotalTrack VLM

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## Background

The TotalTrack VLM is new airway device recently introduced into the UK. The manufacturers state that it is,

“The only device that allows for positive pressure oxygenation in the ventilation and intubation and extubation mode with continuous visualization”

It is essentially a video LMA that allows the user to intubate the patient through the device under vision whilst continuously ventilating and maintaining oxygen saturations

The indications are stated as being in both routine and expected difficult situations in theatre, in ITU and as a rescue device.



The goal was to assess the device during the initial trial phase and report the opinions of the team.

## Method

Members of the Kings Airway team had the opportunity to trial this new airway device. The case mix included maxillo-facial, bariatric and orthopaedic patients. The 4 airway consultants and airway fellow had received training in the correct use of the device prior to the trial period.

Following use the team had time to reflect on the device prior to completing an anonymous online questionnaire looking at key aspects of the TotalTrack VLM system. The survey used a 5 point Likert scale and also allowed free text general comments.

## Results

The statements tested were

- 1) Ease of setup of device
- 2) Ease of insertion
- 3) Ease of ventilation
- 4) Quality of video image
- 5) Ease of intubation through device
- 6) Ease of blade removal
- 7) Ease of LMA removal leaving ETT in place
- 8) Overall effectiveness of device

The standout results are that overall the effectiveness is rated as average by 75% of the team, 100% thought removal of LMA leaving ETT in situ was poor or average, blade removal was rated as average by 100%. On the positive side, ventilation was rated as excellent or good by all whilst the image quality was regarded as good.

Most considered the TotalTrack VLM to be a “bulky” device that was cumbersome to use. The removal of the LMA part leaving the ETT in place was regarded as “tricky”. It was noted that it was easy to ventilate using the device which could be useful in certain clinical situations. One respondent questioned what the device adds to the airway trolley and in what situations would it be useful. All accepted that ease of use would probably improve with repeated exposure and practice.

## Discussion

The King's team “study” was simply to gain an initial impression of this new device. Some of the negative comments about the VLM would likely be less of an issue as the experience of the user increased. However, concerns about the bulkiness of the design and the cumbersome nature of removing the LMA leaving the ETT in place are valid. From our initial trial, we would like to highlight the important principle of visualisation of the larynx and ventilation whilst attempting to perform endotracheal intubation. We also would like to recommend that the product would be more user friendly if the company redesign the mechanics and ergonomics of the device.

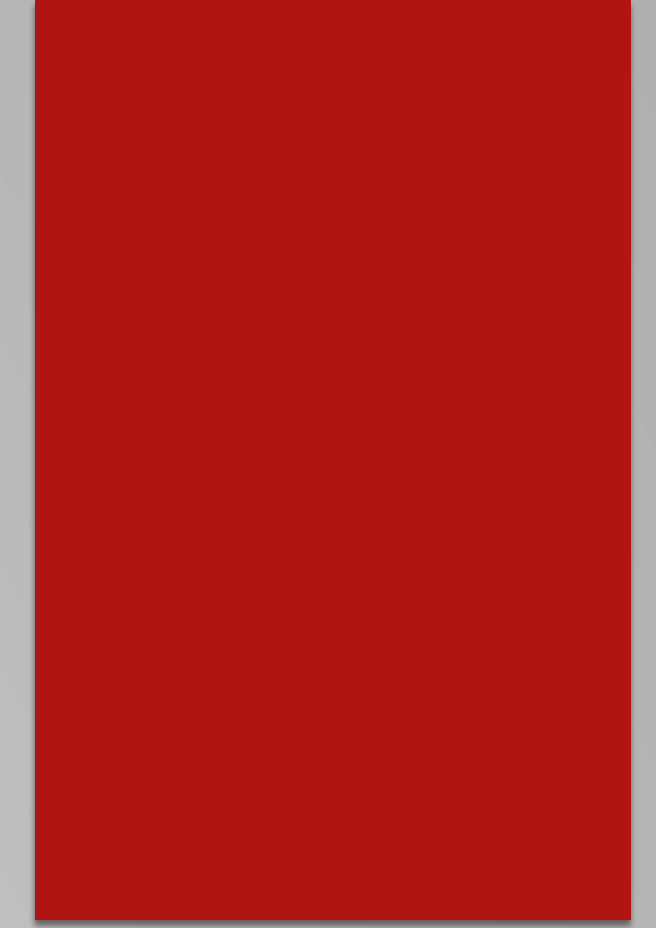
A group in Spain have recently published a case series of 100 uses of the TotalTrack VLM. The patients were not selected for known airway issues. The mean thyromental distance was 5.9cm, sternomental distance 14.5cm and interincisor distance 4.4. Eight patients had a BMI in excess of 35 and seven patients had a previous history of difficult airway management. They concluded that “In all our study patients, a full view of the glottis could be obtained and adequate ventilation established. Securing the airway, once one is expert, takes approximately 40 s. These findings suggest that the TotalTrack™ is a promising device for airway management and has the potential to become a preferred device in the emergency situation of a difficult direct laryngoscopy.”

## References

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- ▶ The trial focused on the King's airway teams initial impressions of the TotalTrack VLM.
- ▶ Range of characteristics assessed using a 5 point Likert scale.
- ▶ Positives included ability to ventilate during intubation and good image quality.
- ▶ Negatives included device was bulky and cumbersome and effectiveness was average.
- ▶ Recent large European trial suggests once one is “expert” the TotalTrack is an effective and useful device in many clinical situations.