

VIDEO LARYNGOSCOPE

SCOPE

This standard operating procedure (SOP) covers the use of the GlideScope Core video laryngoscope (VL) with Spectrum Miller blades at the Simpson's Centre for Reproductive Health. It should be **used in conjunction with local intubation or MIST pause.**

BACKGROUND

The Glidescope Core with Miller Blades can be used to obtain a direct airway view, but also provides a larger view on the video screen.

The VL is a valuable training tool as the supervising clinician can provide real time guidance based on this shared view, and its use is associated with significantly higher intubation success rates amongst inexperienced trainees.¹

INDICATIONS FOR USE

The VL should be used for **all tracheal intubations and MIST procedures in infants weighing >1250g.**

It should be **considered in infants weighing >1000g.**

EQUIPMENT

GLIDESCOPE CORE VL

The Glidescope Core is stored in the **neonatal unit treatment room.** It should be **stored plugged in** to ensure adequate charge. If adequately charged, it can be used at cotside without plugging in.

To use the Glidescope Core VL:

- Always use in conjunction with **intubation or MIST pause, consider escalation plan, and ensure conventional laryngoscope also checked.**
- **Clean** with Clinell Universal Wipes.
- Ensure **adequate charge.** Plug in if not fully charged.
- **Turn VL on** using power button at bottom left corner of screen.
- **Open and attach appropriately sized single-use blade** (see table 1).
 - o NB Blades are single-procedure use, if more than one attempt is need per procedure then same blade can be used.

After use:

- **Dispose of blade** in clinical waste bin.
- **Take the video-laryngoscope to the dirty utility room to be cleaned.**
- **Document intubation** in Badger.



Figure 1: Glidescope Core VL

BLADES

Miller blades (Glidescope Spectrum) are available in the following sizes: **S0; S1**.

Blades are stored in the **neonatal unit store room**.

Blades are **single patient use and disposable**.

- The blade should only be attached just prior to procedure and discarded immediately after.

Suggested blade sizes are outlined in table 1.

Table 1: Suggested blade sizes

Weight (kg)	ETT Size (mm)	Length at lips (cm)	VL Blade	Conventional Blade
0.5	2.5	6		00/000
0.75	2.5	6.5		0/00
1	2.5	7	S0	0/00
1.5	2.5	7.5	S0	0/00
2	2.5 / 3	8	S0	0/00
2.5	3	8.5	S1/S0	1/0
3	3 / 3.5	9	S1/S0	1/0
3.5	3.5	9.5	S1/S0	1/0
4	4	10	S1/S0	1/0



Figure 2: Comparison of blades (VL left, CL right)



Figure 3: Comparison of blades (VL left, CL right)

There are some **differences between the VL blades compared to conventional laryngoscope (CL) blades:**²

- The tip of the VL blades are more curved (*Fig 2*).
- The VL blade is slightly wider (*Fig 3*).
- The overall vertical height of the VL blades is less (*Fig 4*).

This can result in a shorter and narrow view of the oropharynx on direct laryngoscopy, whilst the view on the screen is maintained. **Asking an assistant to lift the infant's upper lip can expand the direct view.**



Figure 4: Comparison of blades (VL left, CL right)

REFERENCES

1. O'Shea JE, Thio M, Kamlin CO, McGrory L, Wong C, John J, Roberts C, Kuschel C, Davis PG. Videolaryngoscopy to Teach Neonatal Intubation: A Randomized Trial. *Pediatrics* 2015; 136 (5): 912-919.
2. Kirolos S, O'Shea JE. Comparison of conventional and videolaryngoscope blades in neonates. *Arch Dis Child Fetal Neonatal Ed.* 2020; 105 (1): 94-94. DOI: 10.1136/archdischild-2018-315644