NAVA Catheter Insertion Clinical Flowchart
To support insertion and optimal position
Page 1: **NAVA Catheter Insertion**

UK NAVA

STOP & CHECK

Randomised?

- Confirm the patient is enrolled in the UK NAVA trial
- Ensure allocation to the NAVA technology arm

When?

- Insert NAVA catheter within 6 hours of randomisation
- If reinserting; at a time that is appropriate for both patient & team

Who can insert?

- ICU clinical staff permitted to insert standard NG/OG tubes

Equipment

- Servo-u ventilator
- EDi module (non-disposable)
- EDi cable (non-disposable)
- NAVA catheter (single use)
- Water (to activate lubcricant, no other lubricant)
- Tape measure (included in NAVA catheter box)

Adult NAVA catheter sizes

Further guidance on box, exercise clinical discretion
12 Fr: patient height 75-160 cm (2' 6" - 5' 3")
16 Fr: patient height >140 cm (4' 7")

Gather equipment & select NAVA catheter size

Module Test ✅

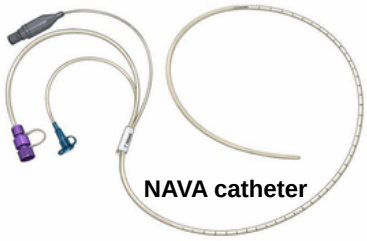
1. Connect the EDi cable to the EDi module
2. Connect other end to the cable test port
3. The test starts automatically
4. Proceed if; '**EDi Module Test passed**' is displayed



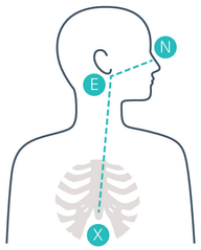
EDi module



EDi cable



NAVA catheter



NEX measurment

Estimate Insertion Depth

On the Servo-u interface, select:

1. '**>**' (left of screen)
2. '**EDi & NAVA**'
3. '**EDi Catheter Insertion**'
4. Using tape measure, measure NEX (Nose (bridge) → Ear lobe → Xiphisternum)
5. Enter NEX and other information into the '**calculation tool**' to obtain an estimated insertion distance



Catheter Insertion

1. Dip tip in water (activates lubrication)
2. Insert to the estimated insertion distance
3. Connect to the ventilator via the EDi cable

Gastric position MUST be confirmed using local policy

4. Select '**EDi Catheter Positioning**' on ventilator

Fine tune for optimal catheter position ***see reverse page***

Tips & Reminders

- Double-check NEX measurement with a colleague
- If reinserting a catheter of the same size and previous EDi trace was good, consider using the previous insertion depth
- Gastric position MUST be confirmed using local policy

Servo-u Interface in NAVA Monitoring



UK NAVA

Look at the EDi Trace,
is it a **wave**form of is it flat?

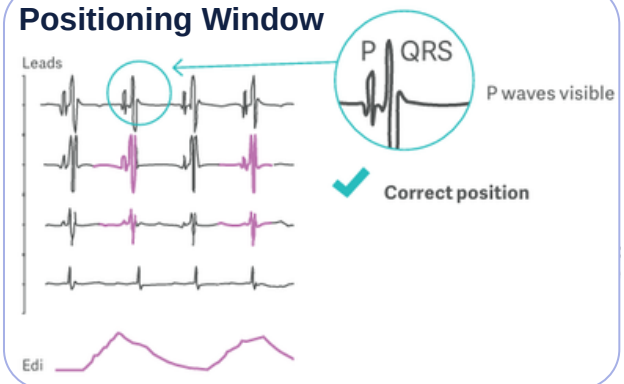
WAVEFORM

Fine tune using the positioning window

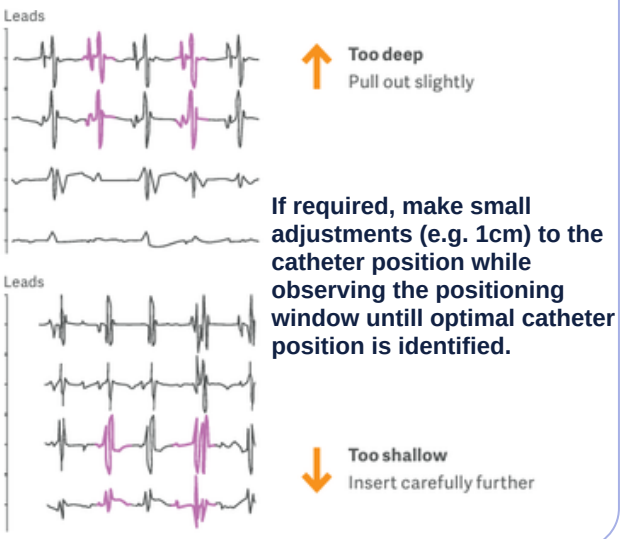
Optimal catheter electrode position is indicated by:
a. Large ECG at top reducing to small ECG at bottom
b. Purple highlighted ECG in 2 and 3 (middle) traces

Read the screen and look at the arrows to identify this. Some movement between the ECG trace is normal.

Positioning Window



Re-positioning



If required, make small adjustments (e.g. 1cm) to the catheter position while observing the positioning window untill optimal catheter position is identified.

Optimal electrode position indicated? ✅

1. Secure NAVA catheter
2. Enter the final insertion distance into the positioning window
3. Verify the position regularly, i.e. handover/ safety checks

FLAT

Do not fine tune using the positioning window

Remeasure NEX
Advise to check measurement with a colleague

Different measurement?

1. Update '**EDi Catheter Insertion**' to obtain a new estimated insertion distance
2. Change catheter position in patient accoringly to new estimated insertion distance

Same measurement?

1. Secure NAVA catheter at estimated insertion distance
2. Enter distance into the positioning window

Optimise EDi waveform

If it is clinically appropriate, increase respiratory drive by:

- Reducing sedation
- Reducing ventilatory support
- Switching to spontaneous mode
- Asking the patient to take a deep breath or perform an expiratory breath hold

Reasses EDi trace

Tips & Reminders

- If the waveform is noisy, there is an issue, or optimisation does not increase EDi, see troubleshooting flowchart
- Gastric position MUST be confirmed using local policy
- If using x-ray to confirm gastric location, include in request for NAVA catheter NG confirmation

Contact UK NAVA Team for Support

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🌐 www.uknava.com
Online training: https://corecct.learnprouk.com