# **PES treatment 5**

Record ID



UK ISRCTN 98886991 UK IRAS306761 UK CPMS 50913 WHO UTN U1111-1273-9942 Pharyngeal Electrical stimulation for Acute Stroke dysphagia Trial (PhEAST)

### PES Fifth treatment form v1.3

- ▶ Please check consent form obtained.
- ▶ Please check PES Fourth treatment form is completed.

Section A: Participant details	
A1. Centre name:	
	(Centre)
A2. Participant ID :	
	(Participant ID)
A3. Participant initials (e.g. ABC or A-C) :	
	(3 uppercase letters, or 2 separated by a hyphen (-))
A4a. Follow-up status for 5th treatment	<ul> <li>Randomised to control</li> <li>Agreed to treatment 5</li> <li>Refused treatment 5</li> <li>Withdrawn from trial and all treatments and follow-ups</li> <li>Temporarily discontinue</li> <li>Discontinue further PES</li> <li>Discharged</li> <li>Died</li> </ul>
A4b. If treatment refused, please specify reason for refusal	

#### **Section B: Fifth PES treatment**

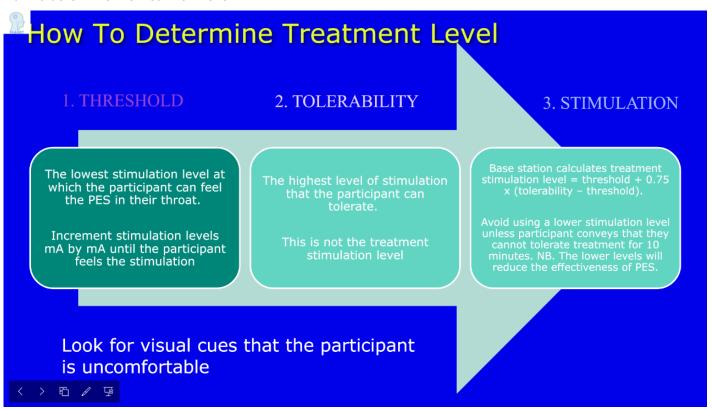
PES on top of guideline-based standard-of-care. (i.e. IN ADDITION TO standard-of-care) PES will be administered on days 1-6 using a commercial catheter with integral feeding tube. PES involves six daily 10 minute treatments at 5 Hz; threshold and tolerability currents will be assessed and the treatment current set at threshold  $+ 0.75 \times (tolerability - threshold)$  with current generated by a base-station. Dosing levels will be monitored, and sites informed if the stimulation current is too low, i.e. < 20 mA.

Potential causes of over treatment include PES given: • For more than 10 minutes - the base station prevents this; • For more than 6 days - the device catheters prevent this; • At too high a current - the participant would indicate this as severe discomfort. Correct calculation of treatment current from threshold and tolerance currents will prevent this. In each case, turning the base station off will prevent over-treatment.

Over or under stimulation and deviations from recommended current or times will be monitored: • Difference threshold - tolerance < 8mA • Delivered stimulation < 20 mA • Delivered stimulation not within 2 mA of calculated stimulation level • Calculated - delivered stimulation level > 2 mA • Delivered stimulation differs from calculated stimulation level • Duration is too short, i.e. < 9:50 minutes • Duration is too long, i.e. > 10:00 minutes • PES treatment levels cannot vary by > 30% between treatment sessions.

#### How to determine the treatment level?

How to determine the treatment level



## Was the treatment given?

B1a. Was the Fifth PES treatment given?

○ Yes ○ No

B1b. If not, why was the 5th PES treatment not given?	<ul> <li>Randomised to control</li> <li>Catheter could not be inserted or position verified</li> <li>Discharged home or to another institution</li> <li>Died</li> <li>Refused this PES treatment</li> <li>Stopped PES treatment altogether</li> <li>Withdrawn from trial treatment and follow-up</li> <li>Device/equipment failure</li> <li>Safety button used to stop PES</li> <li>Removal of catheter before PES treatment is finished</li> <li>Patient cannot tolerate the tube or removes it</li> <li>Temporarily discontinue the 6 days of PES, e.g., if they transiently deteriorate;</li> <li>Other</li> </ul>
B1c. If "Other", please specify reason for treatment not given	
Treatment date	
B3. Date of fifth PES treatment?	
① [pes_date_1], ② [pes_date_2], ③ [pes_date_3], ④ [pes_date_4]	(Date DD-MM-YYYY)
Threshold - lowest stimulation level	
B4. Fifth PES threshold mA? (lowest stimulation level)	(Integer 1-50)
The lowest stimulation level at which the participant can feel the PES in their throat.	
Increment stimulation levels mA by mA until the participant feels the stimulation.	
Look for visual cues that the participant is uncomfortable.	
Tolerance - highest stimulation level	
B5. Fifth PES tolerance mA? (highest stimulation level)	(Integer 1-50)
The highest level of stimulation that the participant can tolerate. Tolerability level is best assessed by watching the participants face and body for evidence of discomfort rather than repeatedly asking if the current level is excessive (which often leads to lower stimulation levels).	

### Base station calculated suggested stimulation level

B6. Fifth PES calculated stimulation level mA? (as per displayed on the device - expected to be  $\simeq$  [pes\_calculated\_auto\_5] mA) ① [pes\_calculated\_1] mA ② [pes\_calculated\_2] mA ③ [pes\_calculated\_3] mA ④ [pes\_calculated\_4] mA

The base station will calculate the treatment stimulation level from the lowest threshold and highest tolerability levels.

Avoid using a lower stimulation level unless the participant conveys that they cannot tolerate treatment for 10 minutes. (NB. The lower levels will reduce the effectiveness of PES).

(mA (as displayed on the device))

Delivered stimulation - expected to be ≥ 20 mA and within 2 mA of calculated level	
B7. Fifth PES stimulation level mA?	
	(Integer 1-50)
B8a. Does the actual treatment level differ from the calculated level?	○ Yes ○ No
B8b. Please explain why actual stimulation differs from the calculated stimulation	<ul> <li>Participant's calculated stimulation level &lt; 20mA.</li> <li>Participant could not tolerate calculated stimulation level</li> <li>Participant worried about using a higher stimulation level</li> <li>Treater worried about using a higher stimulation level</li> <li>Family worried about using a higher stimulation level</li> <li>Change of staff, i.e. person had not been trained</li> <li>Equipment/device problems during treatment - Please also complete Device deficiency form</li> <li>Participant had low tolerance level</li> <li>Safety button used to stop PES - Please notify manufacturer</li> <li>Other</li> </ul>
B8c. If "Other", please specify reason why stimulation differs	

Treatment duration - expected to be 10:00 minutes.		
B9a. Fifth PES duration?		
(09:50 - 10:00 minutes)	(Time (minutes:seconds))	
B9b. Please explain why actual treatment not done for 10:00 min.  (Treatment should be between 9:50 and 10:00 minutes, ideally the full 10:00 minutes)	<ul> <li>Participant could not tolerate calculated stimulation level</li> <li>Change of staff, i.e. person had not been trained</li> <li>Equipment/device problems during treatment - Please also complete Device deficiency form</li> <li>Participant had low tolerance level</li> <li>Safety button used to stop PES</li> <li>Other</li> </ul>	
B9c. If "Other", please specify reason why full 10:00 minutes not done		
Device details: LOT number and serial number		
B10a. Has the previous treatment catheter been replaced?	○ Yes ○ No	
B10b. If yes, what is the LOT number of the current treatment catheter?		
Section C: Device deficiency		
C1a. Were there any equipment/device problems during treatment 5?	○ Yes ○ No ○ Not applicable	
We have a legal duty to report device or equipment failure to the manufacturer immediately.		
C1b. Description of device or equipment failure		
For example:		
▶ Fifth PES treatment not given because of device or equipme	ent failure.	
▶ Stimulation level differs from calculated level because of de	evice or equipment failure.	
▶ Treatment not done for 10:00 because of device or equipm	ent failure.	
▶ Reported device or equipment failure.		
	ment, complete the Device deficiency form as soon as	

NB. Complete the protocol deviation or SAE forms if applicable.

Section D: Urgent safety measure: (safety button u	sed to stop PES)	
D1. Any urgent safety measures will be conveyed as soon as possible to the sponsor and device manufacturer.		
Please fill in the device defficiency and protocol deviation CRFs and report an SAE should one be applicable.		
D1a. Description of Urgent safety measure (Safety button used to stop PES)		
Any urgent safety measures will be conveyed as soon as possible to the sponsor and device manufacturer.		
Please fill in the device defficiency and protocol deviation CRFs and report an SAE should one be applicable.		
For example:		
▶ Fifth PES treatment not given because the safety button was	used.	
► Stimulation level differs from calculated level because the safety button was used.		
▶ Treatment not done for 10:00 because the safety button was used.		
Section E: SWAT and reportable event		
E1. More details on possible S.W.A.T. or reportable event		
$\triangle$ Stimulation level or duration of treatment is too low, high or	not within the tolerance range.	
Potential causes are:		
<ul> <li>Difference threshold - tolerance &lt; 8mA</li> <li>Delivered stimulation &lt; 20 mA</li> <li>Delivered stimulation not within 2 mA of calculated stimulation level</li> <li>Calculated - delivered stimulation level &gt; 2 mA</li> <li>Delivered stimulation differs from calculated stimulation level</li> <li>Duration is too short, i.e. &lt; 9:50 minutes</li> <li>Duration is too long, i.e. &gt; 10:00 minutes</li> <li>PES treatment levels cannot vary by &gt;30% between treatment sessions.</li> </ul>		
Section F: Day 5 treater information.		
Please note: The person(s) providing treatment mu	st not perform subsequent assessments	
F1. Please enter your name?		
	(Person giving the treatment)	
F2a. What is your professional role?	<ul> <li>○ Doctor</li> <li>○ Research coordinator</li> <li>○ Nurse, clinical</li> <li>○ Research nurse</li> <li>○ Physiotherapist</li> <li>○ Occupation therapist</li> <li>○ Speech &amp; Language therapist</li> <li>○ Other</li> </ul>	

F2b. If "Other", please specify your role	
F3. Does your role involve working on stroke wards?	○ Yes ○ No
F4. Please enter your name if you did not do the treatment	
F5. Please sign the form	
	(≰ Signature)
Comments and full explanation for missing data	
Are any values missing due to tests not done (or measures not taken), or because data are unknown and every effort has been made to find the data - i.e. 'Not done' / 'Not known'?	○ Yes ○ No

If any values are missing, please provide a full explanation  $\mathop{\square}\nolimits_{\square}$  Comments