

PROTOCOL MANUAL

Neurology and neurosurgery

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INTRODUCTION

Getting Started – NESA Guide

What does it entail?

This Protocol Manual serves as a concise guide for standardizing noninvasive NESA® neuromodulation, drawing on extensive clinical experience and trials. It is particularly beneficial for hospitals and clinics that need established treatment guidelines, whether due to their unfamiliarity with the technology or the impracticality of training healthcare personnel in clinical reasoning. As this pertains to a medical device, the onus of implementing the protocols rests with the university physician or healthcare professional, along with their patient history and clinical judgment.

The protocols outlined herein enhance the patient's symptoms, fostering more versatile adaptive responses within the body by improving the autonomic nervous system. Under no circumstances should the patient's pathology or illness be considered curable.

Who is the intended audience?

Physicians, physiotherapists, nurses, psychologists, speech-language pathologists, podiatrists, and other healthcare professionals holding university degrees.

Structure of the guide

NESA Multidisciplinary protocols

Protocols applicable across various specialties, demonstrating a favorable degree of success, include those addressing sleep, pain, fatigue, and anxiety, all of which concentrate on modulating the autonomic nervous system.

Fundamental protocols by clinical specialty

A collection of standardized protocols established by experts with considerable experience, grounded in interventions that yield consistently positive outcomes.

Advanced protocols by clinical specialty

Recommendations for managing complex clinical cases should serve as a guide within a framework of sound clinical reasoning. Their implementation without adequate clinical judgment may jeopardize outcomes.

Frequently Asked Questions and Troubleshooting



Warning

The absence of fundamental training in clinical reasoning and/or continuous education [NESA Academy courses, NESA literature review, community engagement] considerably restricts attainable clinical outcomes.

FOUNDATIONAL CLINICAL REASONING

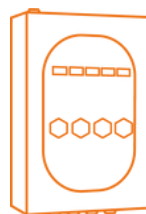
Principles of Responsible Usage



ASSESS



REASON



APPLY

Evaluate the patient and establish a therapeutic objective prior to selecting a protocol.

Adjust parameters: Use the tables as a preliminary reference and alter location, frequency, and duration based on the response.

Monitor clinical changes: Regularly inquire with the patient regarding any alterations and sensations to modify the program for optimal outcomes. An objective assessment utilizing questionnaires or supplementary tests is advised every 10 to 30 sessions, contingent upon the specific case.

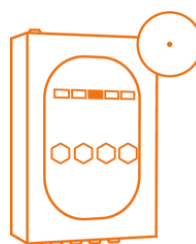
Document each session meticulously. Record the parameters, targeted electrode locations, patient sensations during the session, and overall outcomes, including the date, to enhance decision-making and progression.



**Assessment of the
medical history**



Goals



**Select the program and
position the electrodes.**



Re-evaluation

When embarking on a journey with technology, it is quite common.



- Neglecting to apply the electrode.
- Incorrect placement of electrodes on gloves and anklets (refer to kits).
- Always maintain consistent programming.
- Refrain from relocating the C7 targeting electrode.

FOUNDATIONAL CLINICAL REASONING

Number of sessions and treatment frequency

Suggested frequency

The treatment frequency should be determined according to the therapeutic objective.

An induction phase, characterised by a high frequency of 2 to 5 sessions per week, is recommended during the initial treatment period until the desired results are achieved. As the patient progresses, and provided that a fixed protocol has not been established, the frequency of sessions may be gradually reduced, leading to the initiation of a maintenance phase. Depending on influencing factors, it may be appropriate either to conclude treatment or to proceed with a second, more extended maintenance phase.

When used as a supplementary treatment to a primary intervention (such as surgery or other therapies), it may be administered with the same frequency as the primary treatment (including a single session), provided that a direct clinical effect of XSignal is not expected, but rather to enhance the effectiveness of the primary treatment.

INDUCTION PHASE (1–4 months)

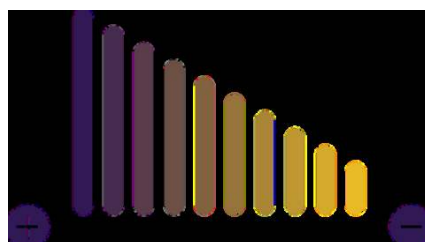
HIGH FREQUENCY

5–4–3 sessions per week

MEDIUM FREQUENCY

3–2 sessions per week

MAINTENANCE PHASE (≥ 2 months; indefinite)



LOW FREQUENCY

2–1 sessions per week

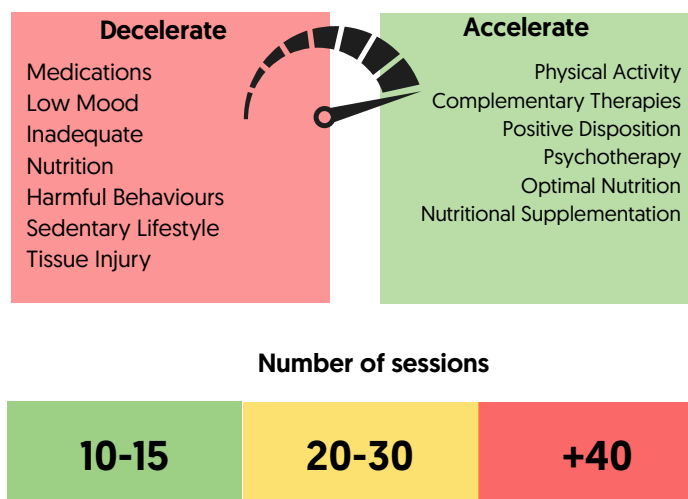
REMISE AND REHABILITATION

SESSIONS

AFTER COMPLETING NESA IN
ADDITION TO OTHER THERAPIES

Suggested frequency

The number of sessions required to modulate a patient's autonomic nervous system will depend on various factors and conditions. The diagrams below summarise these factors and indicate what can be expected from the treatments administered.



BASIC CLINICAL REASONING

PROGRAMMES

Low-intensity programme with stimuli applied over time.

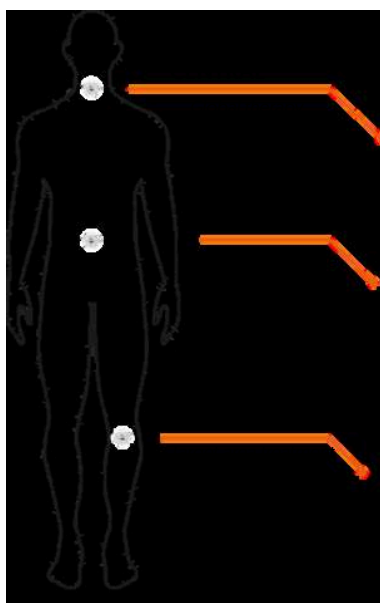
Programmes that stimulate isolated electrodes to elicit responses along specific body planes.

Programmes to be applied after electrode placement, which produce measurable results.

Targeted action programmes within the cranial region, encompassing both cerebral structures and the cranial nerves associated with the cephalic area.

	FUNCTION	SUGGESTED DURATION	LOCATION
Start PROGRAM 1	Homeostasis	15-45'	Central
Location PROGRAM 2	Ventral	15-30'	Central – Metamerie – Focal
PROGRAM 3	Dorsal	15-30'	Central – Metamerie – Focal
PROGRAM 4	Sagittal	15-30'	Central – Metamerie – Focal
Action PROGRAM 5	Resource Optimizer	15-60'	Central – Metamerie – Focal
PROGRAM 6	Analgesia	15-60'	Central – Metamerie – Focal
PROGRAM 7	Autonomic Nervous System	15-120'	Central – Metamerie – Focal
Tuning PROGRAM 8	Central Nervous System	15-30'	Central – Metamerie – Focal
PROGRAM 9	Facial and Trigeminal Nerves	15-120'	Central-cephalic region

Steering electrode



First Initial Phase

In the initial phase of treatment, the targeting electrode is positioned centrally to elicit both central and peripheral responses, thereby establishing primary global contact.

Second Specific Phase

Following observation of the patient's initial response to treatment, the intervention is administered to targeted metamerie regions, in alignment with the objectives established for the specific case.

Third Impulse Phase

If the patient does not respond to treatment as anticipated, the microcurrent may be directed to a specific point. If the response is excessively intense, it can be adjusted by reverting to metamerie treatment.

Professional accountability

Protocols serve as guidelines rather than prescriptions. The healthcare professional using this technology bears full responsibility for prescribing, monitoring, and adjusting treatment, based on clinical reasoning and the individual analysis of each patient.

Subsequent actions

- Review the principles on campus at <https://nesacamp.thinkific.com/>
- Complete the foundational module online
- Implement a pilot protocol and document progress
- Share your questions and findings with the NESA community (join the Telegram group [ES/EN] and/or email clinical@nesaworld.es with any queries)

NESA Clinical Team - 2025

EXPLANATORY GUIDE ON THE UTILIZATION OF THE MANUAL

How should I use this manual?

The NESA protocol manual serves as a fundamental introductory guide to support the development of clinical reasoning within the context of the autonomic nervous system. Readers are encouraged to establish their own criteria and rationale for adapting protocols to each patient's case history as they advance in daily practice and participate in other NESA training programmes, including the Expert and Clinical Guidelines Campus.

Warning: Protocols may not be suitable for all patients and should be tailored and adjusted to each individual case.

How should I read the protocols?

The protocols outlined in this manual are grounded in empirical clinical practice and scientific research. They are formulated within clearly defined frameworks that encompass all clinical reasoning variables relevant to the use of NESA, including programmes, application duration, number of sessions, electrode placement targeting, and evaluation recommendations.

Description of the clinical methodology

In patients experiencing pain, the extent of altered sensitivity is often unclear. Progression typically moves from central to local and subsequently to metameric. The electrode should be positioned at the site where changes are first observed. If a particular location induces discomfort, treatment should revert to more central or metameric areas until the patient progresses through the sessions.

Surveys and assessments

to objectively evaluate the patient's progress*



Recommended questionnaires and assessments:

- Pittsburgh
- Actigraphy

Time

The application duration for each programme is specified, with a minimum of 15 minutes. Sessions are standardised at 60 minutes.

Number of sessions

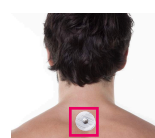
The final grid indicates the suggested quantity [...20] = 20 sessions.

Programmes

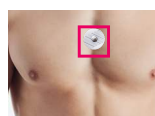
Each box denotes the programme used at the specified time. Select according to the region to be treated [P2 – Ventral, P3 – Dorsal, P4 – Sagittal]. Other indications are denoted by [*] and [**].

		% of time and programs			
		15 min	15 min	15 min	15 min
Number of sessions	1	P 1 30MIN		P 7 30MIN	
	2				
	3	P 2 15MIN	P 6 15MIN	P 7 15MIN	P 8 15MIN
	4				
Sternum	5	P 2 15MIN	P 7 30MIN		P 8 15MIN
	6				
Corresponding metamere	7	P2 P3 P4 15MIN	P 7 45MIN		
	8				
	9				
Tender point	10	P2 P3 P4 15MIN	P 7 45MIN		
	11				
	12				
	...20	Repeat the sequence using the patient's most favourable response.			

ANATOMICAL NOTES:
DIRECTIONAL ELECTRODE



Spinal Process C6-C7



Sternum



Corresponding metamer



Tender point

Guiding electrode

Location of the targeting electrode

The precise location is indicated to the left of the session number. For additional guidance, anatomical reference images are provided.

The spinal column image refers to the metameric level and should be selected according to the clinical case.

The full-body image should also be chosen in a focused manner, based on the clinical case.

Results documentation

Document the patient's response to each setting to facilitate selection of the most appropriate option thereafter.

NOTES:

- Most protocols adhere to this structure, with the exception of certain specialised protocols in which the procedure is explicitly outlined.
- Questionnaires should be administered in the patient's native language; translation is not appropriate. They must be obtained in their original version, which can readily be found online by searching for the questionnaire name and language. A selection is also available for download in Spanish or English from the Clinical Guidelines Campus.

MULTIDISCIPLINARY PROTOCOLS

Protocols applicable across various specialties have demonstrated a favourable degree of effectiveness in addressing issues such as sleep, pain, fatigue, and anxiety, through an approach centred on the modulation of the autonomic nervous system.



GENERAL SLEEP

Protocol developed to improve sleep quality in individuals without comorbidities. Several combinations are provided; repeat the one that best suits the patient’s needs.

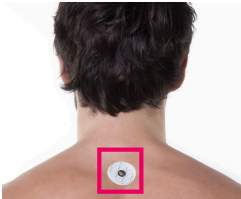
The number of sessions may range from 20 to 40, with frequency adjusted according to the patient’s reported progress. It is advisable to start with 3 to 4 sessions per week.

Number of sessions

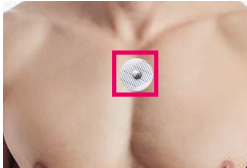
% of time and programs

		15 min	15 min	15 min	15 min
Spinous Process C6–C7	1	P 1 15MIN	P 2 15MIN	P 7 15MIN	P 8 15MIN
	2				
	3	P 2 15MIN	P 7 45MIN		
	4				
Sternum	5				
	6	P 2 15MIN	P 7 45MIN		
	7				
Nasion	8				
	9	P 2 15MIN	P 7 30 MIN	P 8 15MIN	
	10				
Mesenteric	11				
	12	P 2 15MIN	P 7 45MIN		
	13				
	...20	Repeat the sequence using the patient’s most favourable response.			

ANATOMICAL NOTES:
DIRECTIONAL ELECTRODE



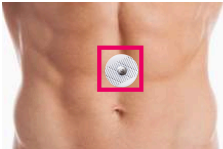
Spinous Process
C6–C7



Sternum



Nasion



Mesenteric



- Recommended questionnaires and assessments:
- Pittsburgh
 - Actigraphy

SLEEP AND ANXIETY

A protocol has been developed to improve sleep quality in individuals experiencing non-specific anxiety. Several combinations are proposed, with a recommendation to select the one that produces the most favourable response in the patient. Depending on the presence of triggering and perpetuating factors during treatment, continued maintenance may be required.



- Recommended questionnaires and assessments:
- Pittsburgh
 - Actigraphy
 - GAD7

SLEEP AND CIRCADIAN RHYTHM

Circadian rhythm disturbances are observed in individuals who are shift workers, frequent travellers crossing time zones, or those who report behaviours such as nocturnal eating. In such cases, treatment may be palliative; assessment of deep and REM sleep using actigraphy is advisable.



Recommended questionnaires and assessments:

- Pittsburgh
- Actigraphy
- Epworth

GENERALIZED DISCOMFORT

In patients experiencing pain, the extent of altered sensitivity is often unclear. Progression typically moves from central to local and subsequently to metameric. The electrode should be positioned at the site where changes are first observed. If a particular location induces discomfort, treatment should revert to more central or metameric areas until the patient progresses through the sessions.

Number of sessions

% of time and programs

	15 min	15 min	15 min	15 min
Spinous Process C6–C7	P 1 30MIN		P 7 30MIN	
	P 2 15MIN	P 6 15MIN	P 7 15MIN	P 8 15MIN
	P 2 15MIN	P 7 30MIN		P 8 15MIN
	*P2 P3 P4 15MIN	P 7 45MIN		
Sternum	*P2 P3 P4 15MIN		P 7 45MIN	
	Repeat the sequence using the patient's most favourable response.			

ANATOMICAL NOTES:
DIRECTIONAL ELECTRODE

Spinous Process C6–C7

Sternum

Corresponding metamere

Tender point

*Select according to the region to be treated [P2 – Ventral, P3 – Dorsal, P4 – Sagittal].

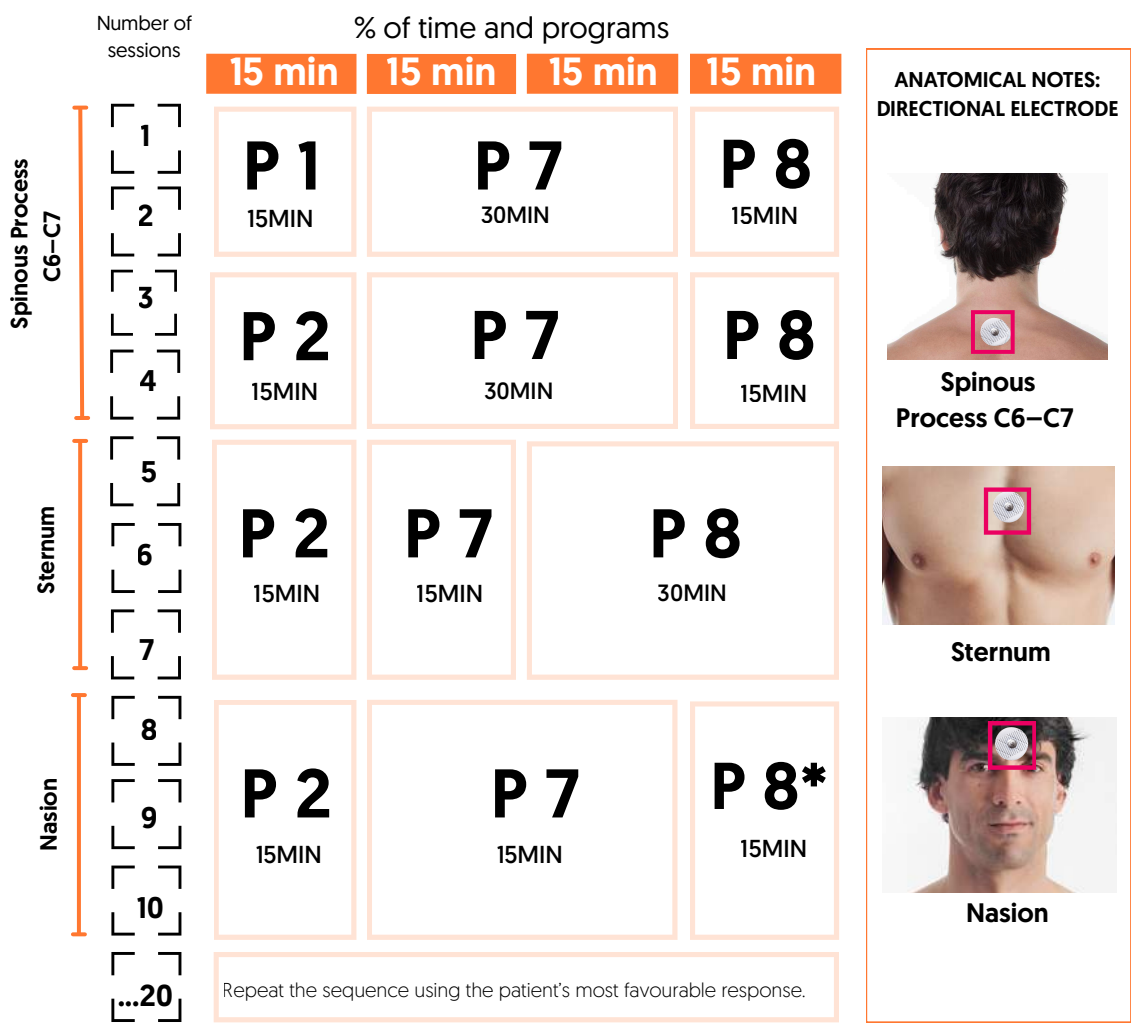


Recommended questionnaires and assessments:

- WeCardio
- Lattinen Test (Chronic Pain)
- LANSS Test (Neuropathic Pain)

GENERALIZED PAIN AND CENTRAL SENSITIZATION

Pain that extends beyond the natural progression of an injury or lacks a known trigger will, by definition, be linked to central sensitization. Sessions may be integrated with other peripheral pain protocols. Patients who experience fluctuating pain at different intervals may necessitate modulation of the vagus nerve and its descending pain inhibition pathway.



- If the patient experiences nervousness following the session or encounters difficulty sleeping, substitute with an additional 15 minutes of P7.

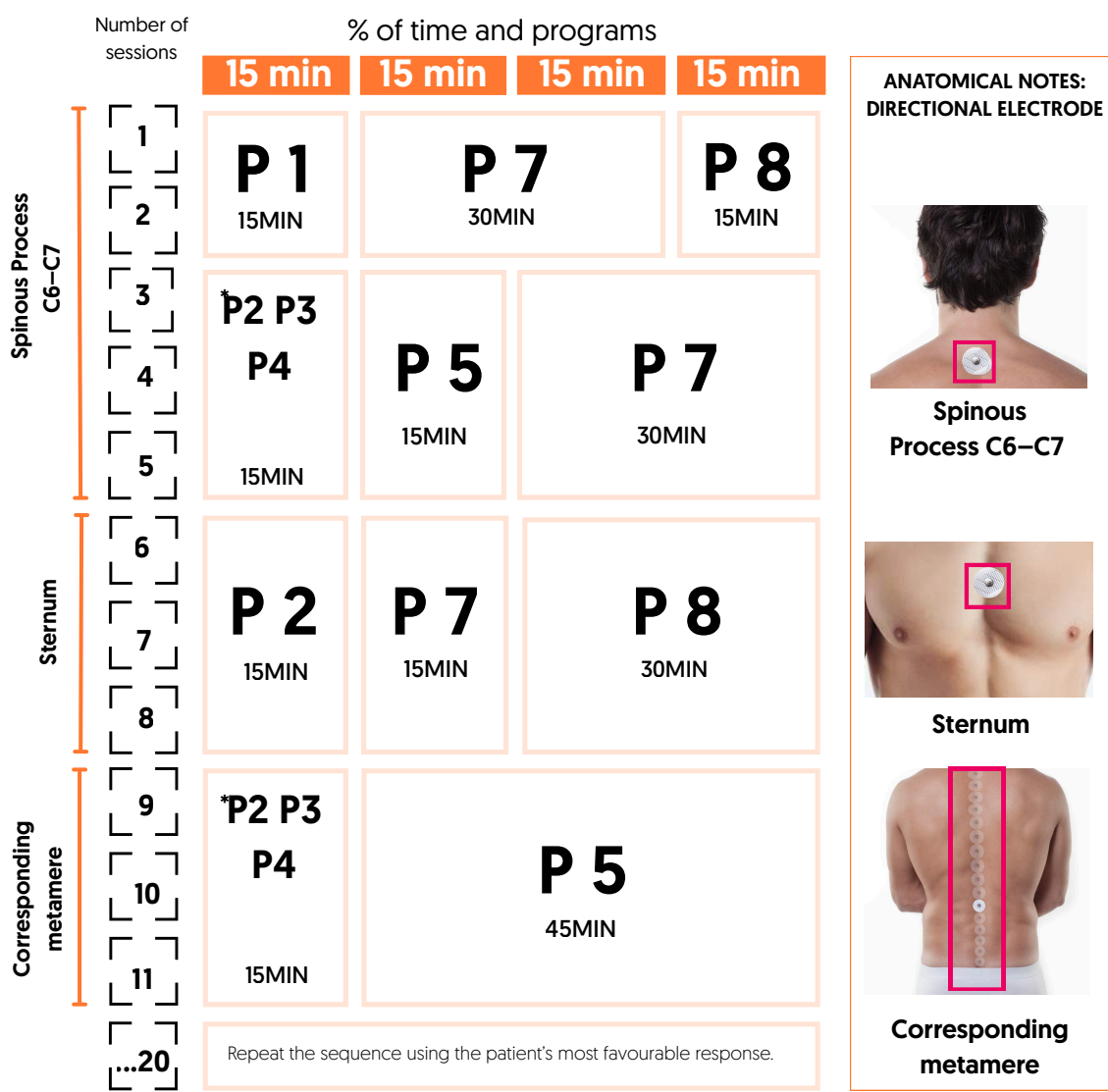


Recommended questionnaires and assessments:

- WeCardio
- Lattinen Test (Chronic Pain)
- LANSS Test (Neuropathic Pain)

GENERALIZED FATIGUE

Fatigue is a symptom characterised by multiple triggers and attributes. It requires a multidisciplinary approach, incorporating laboratory and complementary tests to establish a medical diagnosis. In this context, the recommended treatment focuses on the autonomic nervous system and mitochondrial electrical metabolism, providing a framework for subsequent individualisation.



*Select according to the region to be treated [P2 – Ventral, P3 – Dorsal, P4 – Sagittal].

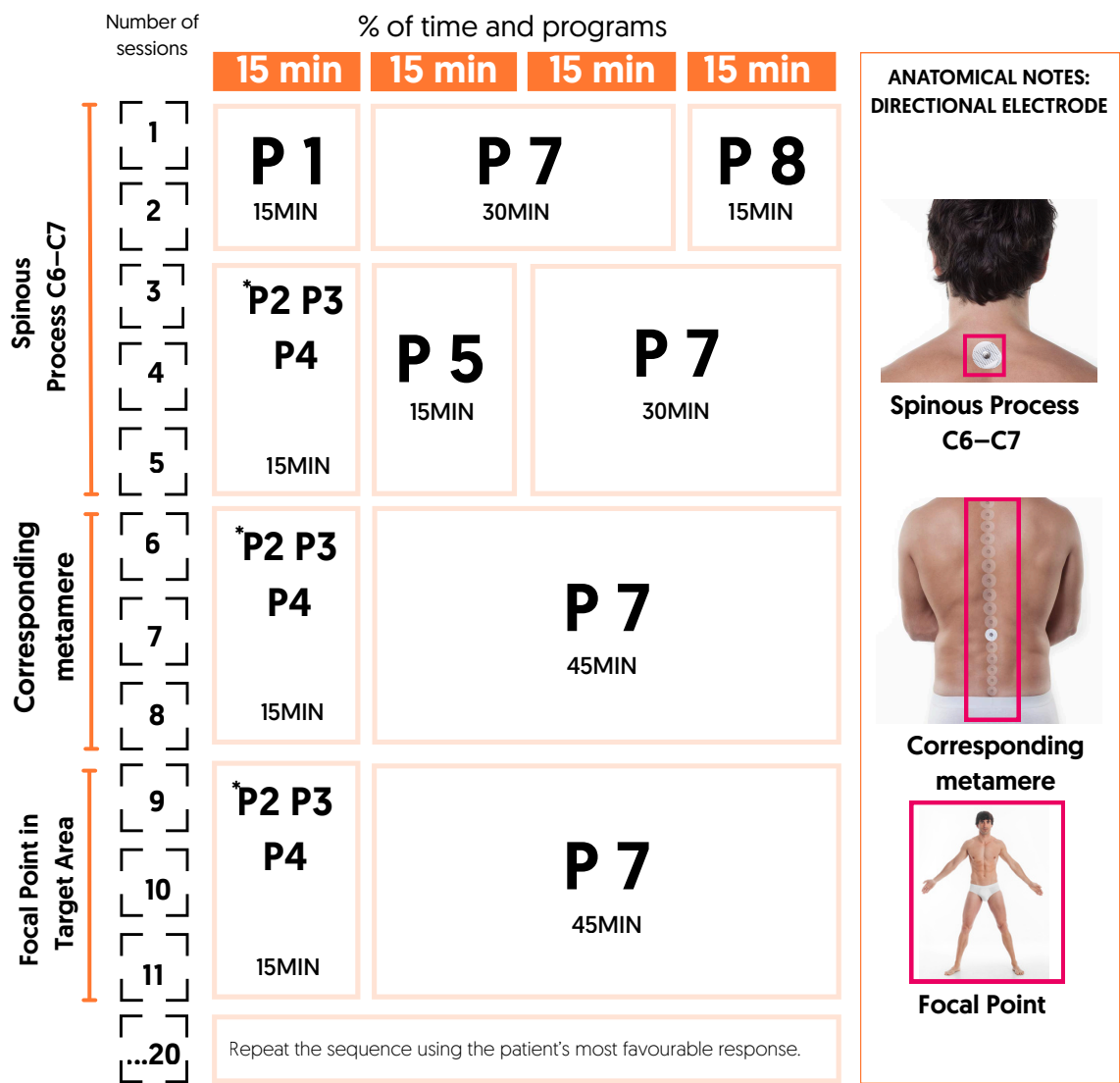


Recommended questionnaires and assessments:

- WeCardio
- Borg Scale
- Epworth Sleepiness Scale (ESS)

FATIGUE AND CHANGES IN MUSCLE TONE

Protocol for fatigue stemming from ineffective muscle contraction. It is also beneficial for spasticity. Assess each patient's requirement to integrate it with Program 5 to varying degrees, or prioritize Program 7.



*Choose according to the region to be addressed [P2-Ventral, P3-Dorsal, P4-Sagittal].

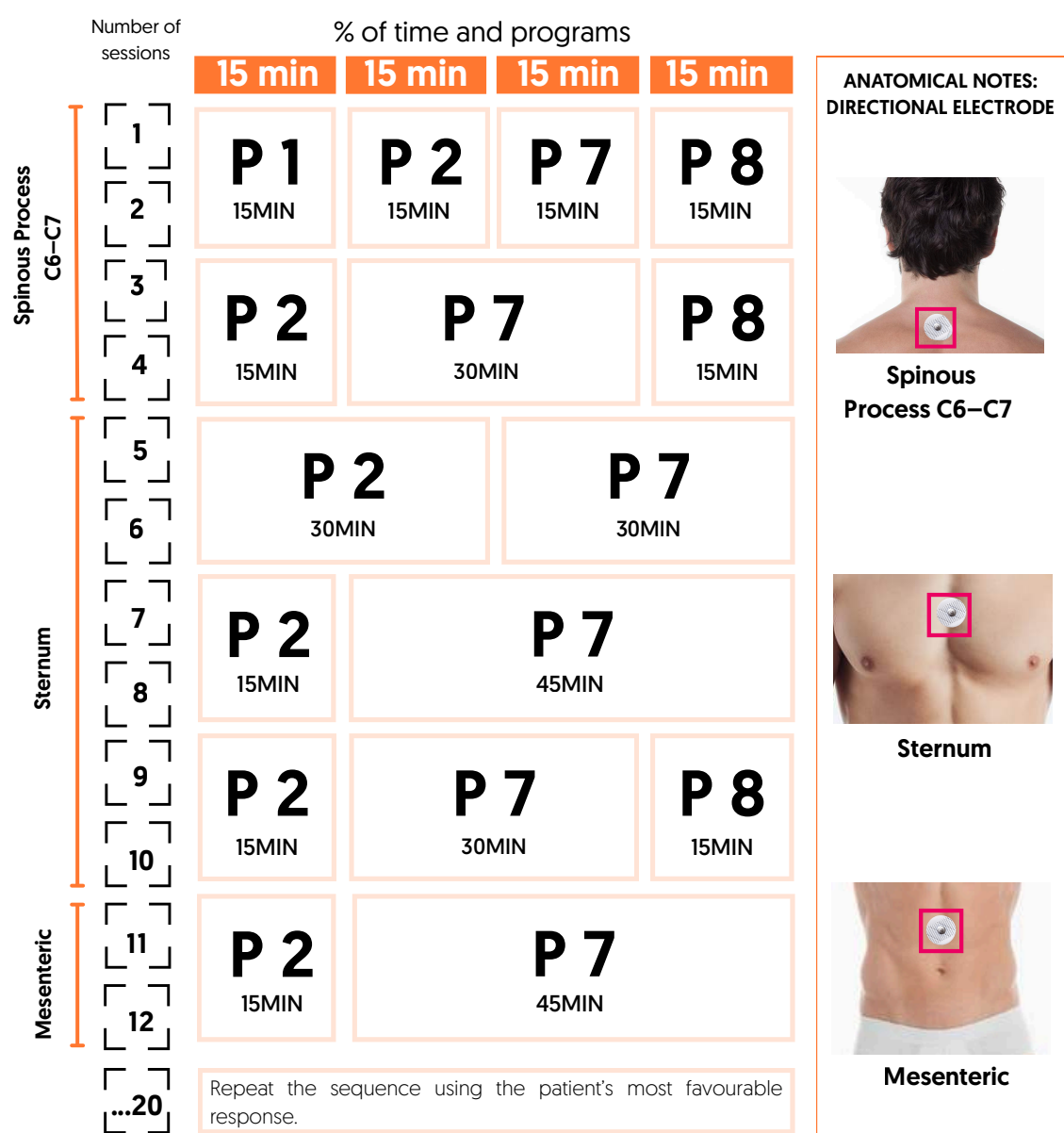


Recommended questionnaires and assessments:

- WeCardio
- Borg Scale
- Modified Ashworth Scale (MAS)

ANXIETY AND NON-SPECIFIC MOOD DISORDERS

The patient’s dysfunctions are frequently associated with anxiety. Clinical evidence indicates that treatment using NESA microcurrents, in conjunction with psychotherapy, can provide substantial benefits. These programme combinations have demonstrated effectiveness, even when applied independently in certain cases. It is essential to maintain the sequence that elicits the optimal response.



Recommended questionnaires and assessments:

- WeCardio
- Cortisol (if necessary)
- GAD-7
- Hamilton Anxiety Rating Scale (HAM-A)

NEUROLOGY AND NEUROSURGERY

Fundamentals by clinical specialty

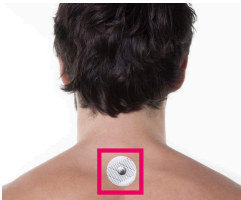


NON-SPECIFIC HEADACHES AND MIGRAINES

Given the extensive classification of migraines, this section will focus on practical criteria for clinical application. The primary area of pain should be considered when determining the precise placement of the targeting electrode. In general, Programme 8 is recommended for headaches of central origin, whereas Programme 9 is advised for those of trigeminal origin. For a more detailed explanation, reference should be made to the NESA® training programme.

		% of time and programs			
		15 min	15 min	15 min	15 min
Spinous Process of C7	1	P 1 15MIN	P 2 15MIN	P 7 15MIN	P 8 15MIN
	2				
Spinous Process C4	3	P 2 15MIN	P 7 30MIN	P 8 15MIN	
	4				
Nasion: Bilateral Involvement Affected Temple: Unilateral Involvement	5	P 2 15MIN	P 7 30 MIN	P 8 15MIN	
	6				
	7		P 7 15MIN	P 8 30 MIN	
	8				
	9				
Nasion: Bilateral Involvement Affected Temple: Unilateral Involvement Pain Region or Nearest Possible Area	10	P 7 15MIN	P 9 45MIN		
	11				
	12				
	13				
	...20				
Repeat the sequence using the patient's most favourable response.					

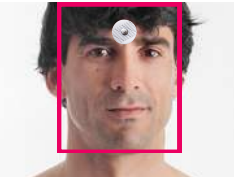
ANATOMICAL NOTES:
DIRECTIONAL ELECTRODE



Spinous Process of C7

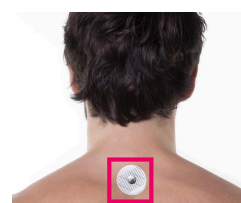


Nasion



Impacted Region

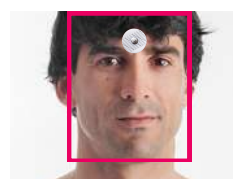
ANATOMICAL NOTES: DIRECTIONAL ELECTRODE



Spinous Process
of C7



Nasion



Impacted
Region

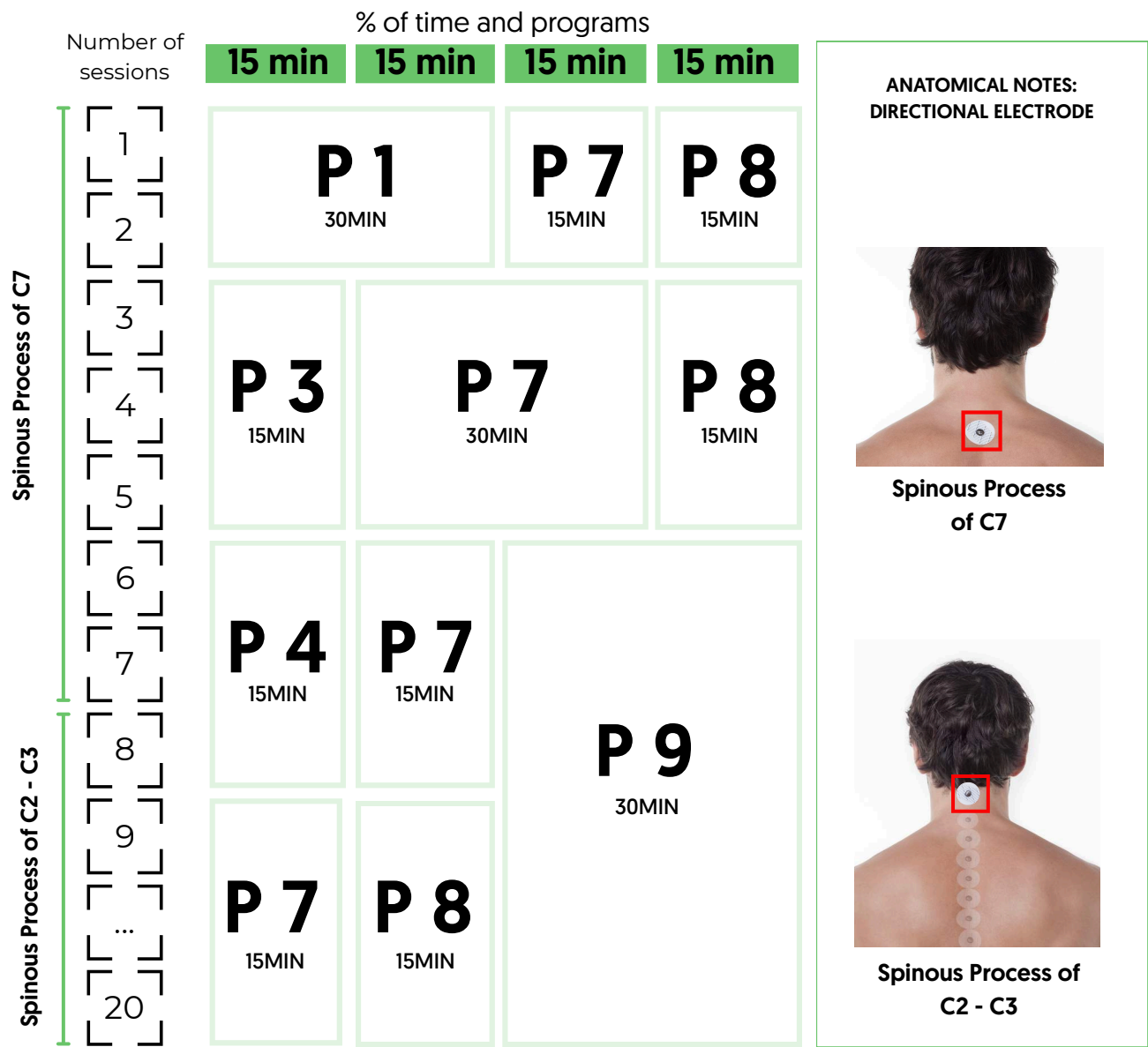


Recommended questionnaires and assessments:

- WeCardio
- HIT-6 (Headache Impact Test)
- MIDAS (Migraine Disability Assessment Scale)

CENTRAL OR NONSPECIFIC DIZZINESS

In cases of vertigo with an indeterminate origin, modulation of the autonomic nervous system may be beneficial. Difficulties in managing vertigo secondary to vestibular or auditory nerve impairment have been reported. It is advisable to start with a high session frequency [three to four times per week] and to gradually increase the interval between sessions as therapeutic objectives are achieved. The targeting electrode may also be positioned over the temporomandibular joint (TMJ).



- Apply the addresser as close as possible to the cranial surface, ensuring that hair does not interfere with electrode contact.

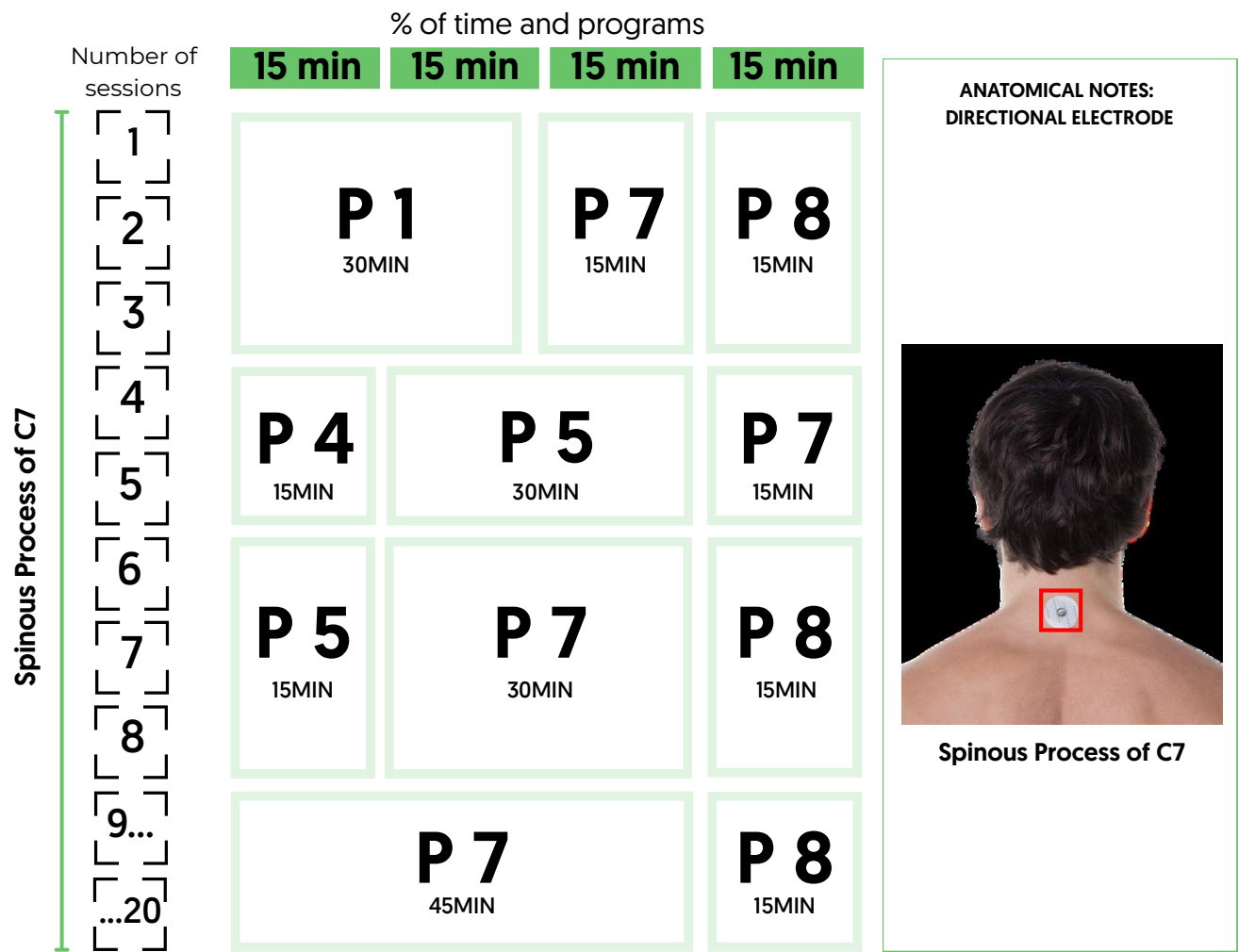


Recommended questionnaires and assessments:

- WeCardio
- Dizziness Handicap Inventory (DHI)
- Berg Scale

QUALITY OF LIFE IN STROKE PATIENTS

Stroke, or cerebrovascular accident [CVA], results from a disruption of cerebral blood flow, leading to neuronal cell death. Symptoms vary according to the affected brain region and may include motor, sensory, or mixed manifestations. Within the NESAC[®] approach, the primary objectives are to improve sleep quality and reduce spasticity, taking into account the role of the autonomic nervous system in regulating muscle tone.



Recommended questionnaires and assessments:

- WeCardio
- EQ-5D
- Pittsburgh Sleep Quality Index (PSQI)
- Modified Ashworth Scale (MAS)

QUALITY OF LIFE IN RADICULAR INVOLVEMENT

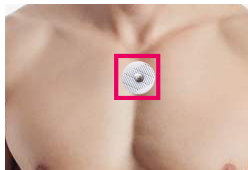
The approach to radicular involvement will vary depending on the affected area and the patient's progress. In cases where progression leads to degeneration or myelopathy in the affected region, outcomes are expected to occur over the long term and may be significantly limited by structural compromise. If no improvement is observed within the first ten sessions, Programme 7 may be progressively introduced in High mode.

Number of sessions		% of time and programs			
		15 min	15 min	15 min	15 min
Spinous Process of C7	1	P 1 15MIN	P 2 15MIN	P 7 15MIN	P 8 15MIN
	2				
Sternum	3				
	4	P 2 15MIN	P 7 45MIN		
	5				
Implied Metamere	6	* P 2			
	7	P 3	P 7 45 MIN		
	8				
	9	P 4 15MIN			
Involved nerve (if required)	10	* P 2			
	11	P 3	P 7 45MIN		
	12	P 4			
	13	P 4 15MIN			
	...20				
		Repeat the sequence using the patient's most favourable response.			

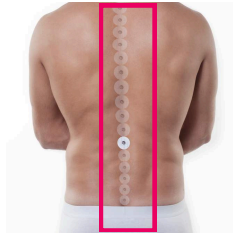
ANATOMICAL NOTES:
DIRECTIONAL ELECTRODE



Spinous Process of C7



Sternum

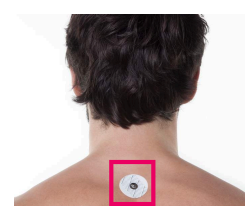


Implied Metamere

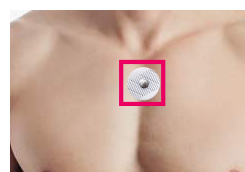


Involved nerve

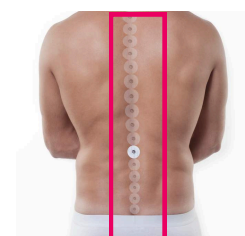
ANATOMICAL NOTES: DIRECTIONAL ELECTRODE



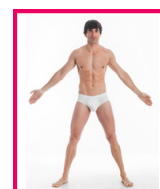
Spinous Process of C7



Sternum



Implied Metamere



Involved nerve

*Select according to the region to be treated (P2 – Ventral, P3 – Dorsal, P4 – Sagittal).



Recommended questionnaires and assessments:

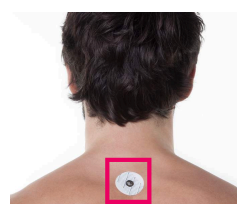
- WeCardio
- LANSS
- LATTINEN

LOCALISED NEUROPATHIC PAIN

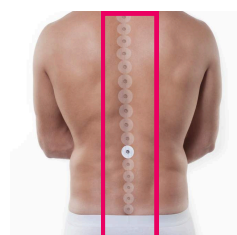
Not all peripheral neuropathic pain is associated with direct nerve involvement. Consequently, the treatment approach will vary depending on the presumed origin in each case. It is essential to identify the affected area and its corresponding innervation to determine which metamere or nerve is involved. This assessment guides the selection of a P2, P3, or P4 treatment. In cases where neuronal damage is present, more than 20 to 30 sessions may be required to achieve an effective response over several months of treatment.

		% of time and programs			
		15 min	15 min	15 min	15 min
Spinous Process C6–C7	1	P 1 15MIN	P 6 15MIN	P 7 15MIN	P 8 15MIN
	2				
Implied Metamere	3	P 6 30 MIN		P 7 15 MIN	
	4				
	5				
	6	* P 2			
Involved nerve (if required)	7	P 3	P 6 15 MIN	P 7 30 MIN	
	8	P 4			
	9	15MIN			
	10				
Pain Area	11	P 7 45MIN			
	12				
	13				
	...20	Repeat the sequence using the patient's most favourable response.			

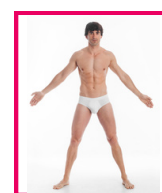
ANATOMICAL NOTES: DIRECTIONAL ELECTRODE



Spinous Process
C6–C7



Implied
Metamere



Involved nerve
and pain Area

*Select according to the region to be treated [P2 – Ventral, P3 – Dorsal, P4 – Sagittal].



Recommended questionnaires and assessments:

- WeCardio
- LANSS
- LATTINEN

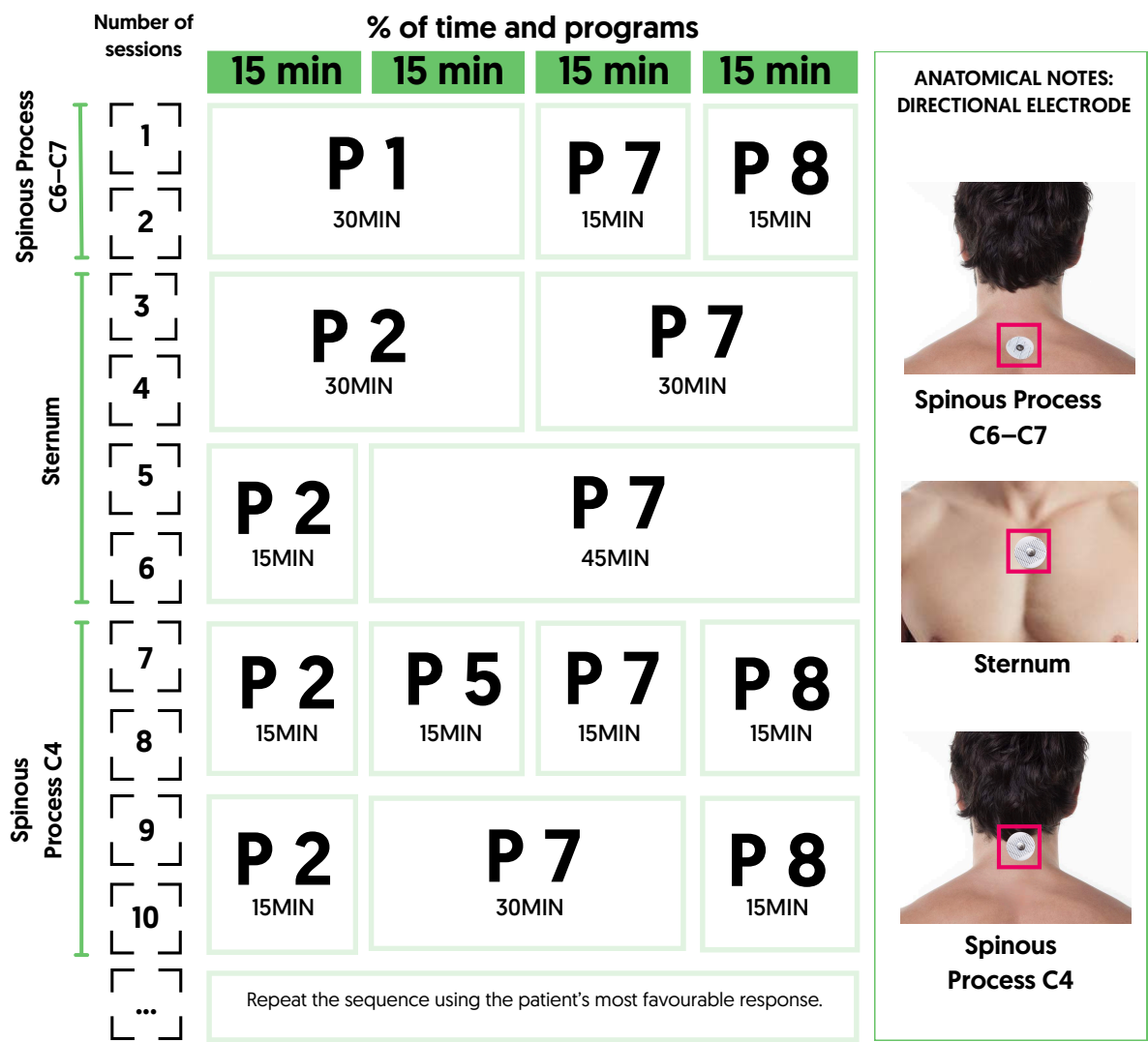
NEUROLOGY AND NEUROSURGERY

Protocols tailored to specific clinical specialties



QUALITY OF LIFE IN INDIVIDUALS WITH ACQUIRED BRAIN INJURY

Patients with acquired brain injury present with a wide range of symptoms that vary according to the extent and specific location of the damage. Consequently, these symptoms may include disruptive behaviours, bruxism, and pain. To address them, it is advisable to follow the specific protocol corresponding to the symptom being treated [see transversal protocols]. Alternatively, for overall improvement in quality of life, the following sequence of sessions is proposed. Maintenance sessions are recommended in such cases, with frequency determined on an individual basis.



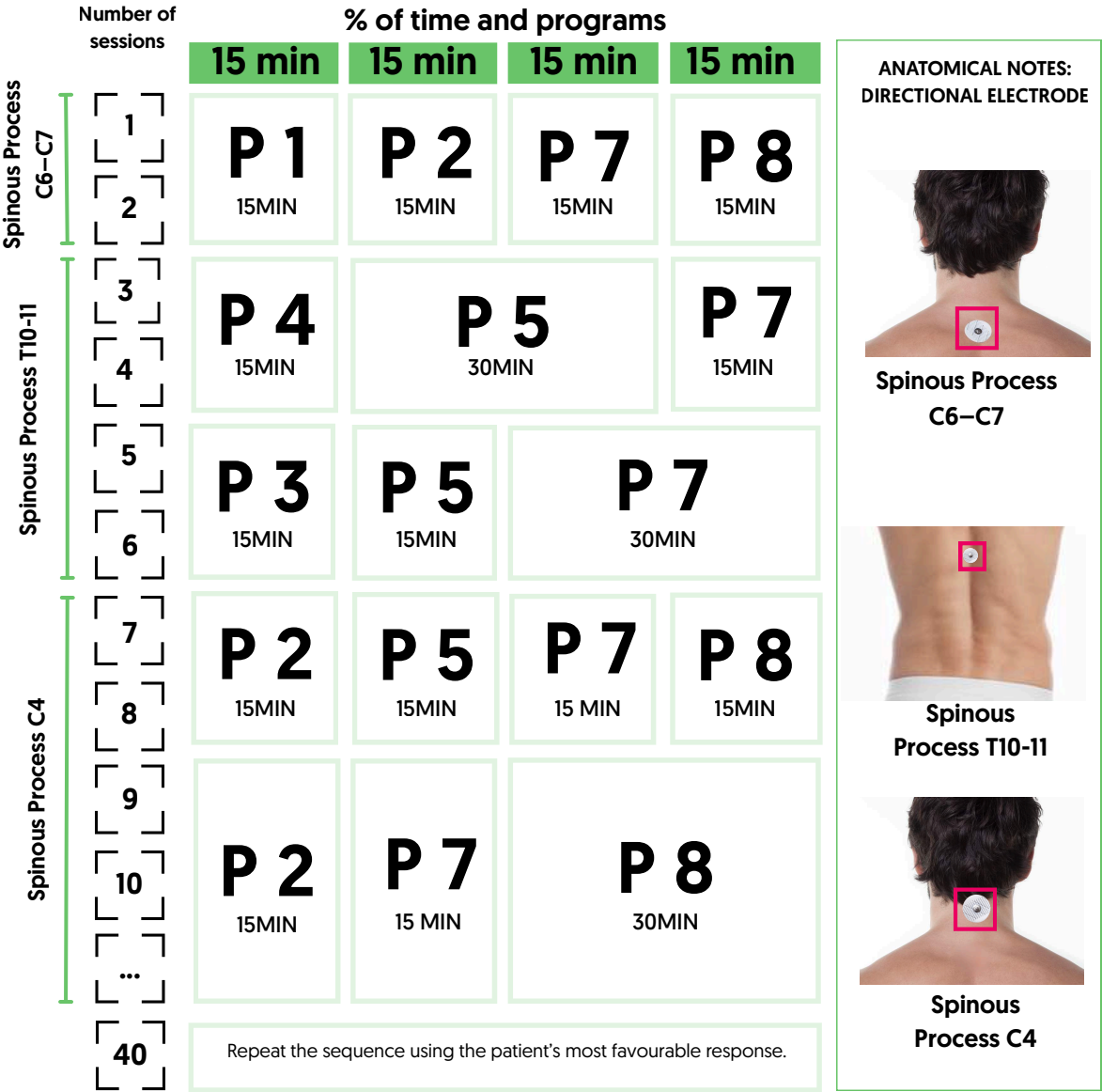


Recommended questionnaires and assessments:

- WeCardio
- Evaluation of acquired brain injury

QUALITY OF LIFE IN INDIVIDUALS WITH PARKINSON’S DISEASE

In clinical practice, patients with Parkinson’s disease present with a wide range of symptoms that fluctuate according to disease progression and individual characteristics. These symptoms may include tremor, rigidity, pain, and behavioural changes, necessitating a tailored therapeutic approach. To address each manifestation effectively, it is advisable to follow the corresponding specific protocols [see transversal protocols]. In parallel, to improve overall gait and quality of life, a series of sessions is recommended, with frequency and duration adjusted according to the individual’s clinical response.



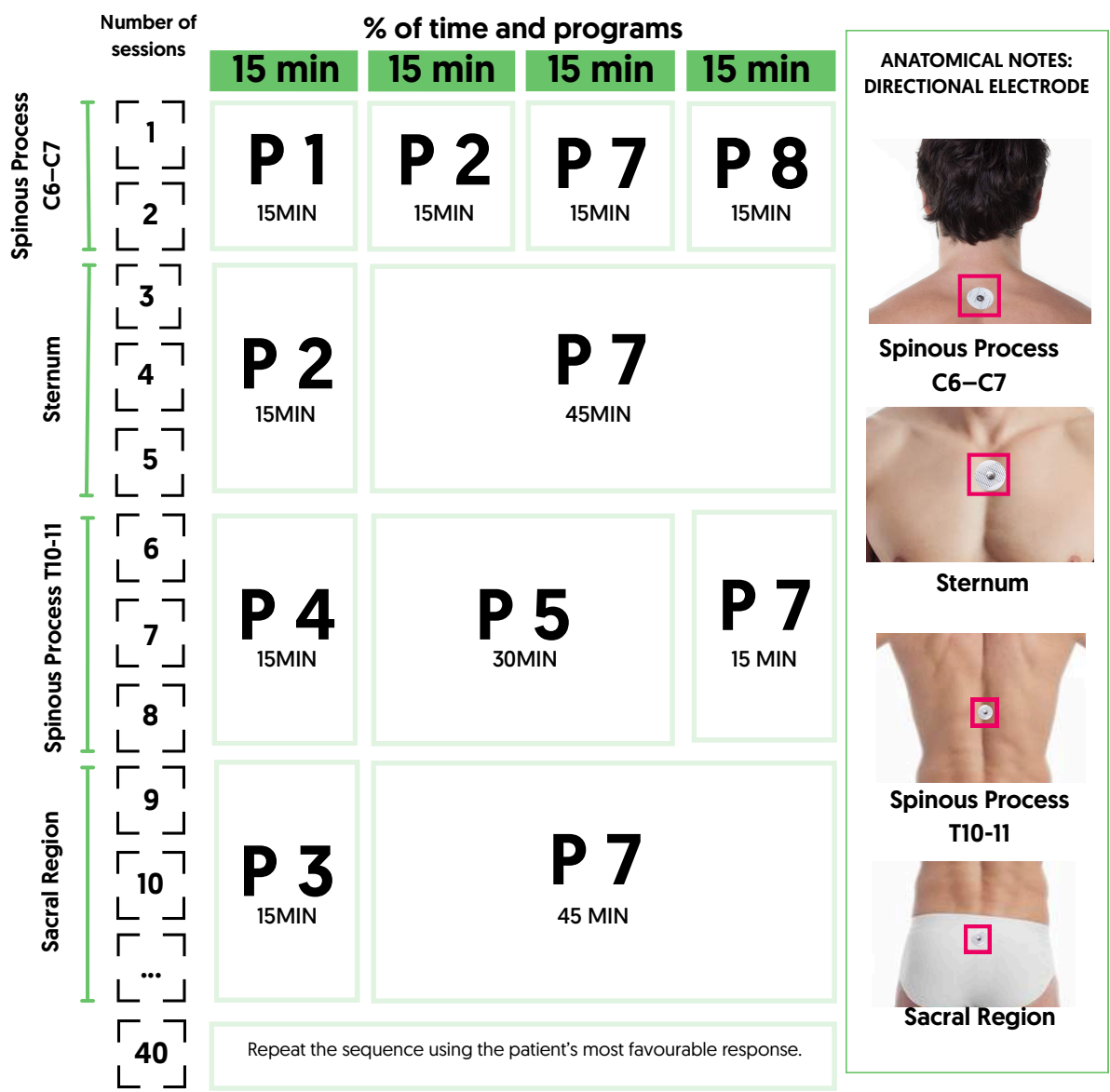


Recommended questionnaires and assessments:

- WeCardio
- EQ-5D
- Barthel Index

QUALITY OF LIFE IN INDIVIDUALS WITH MULTIPLE SCLEROSIS

Clinically, an enhancement in quality of life has been noted in patients with multiple sclerosis, particularly through improved sleep quality, management of neuropathic pain, and treatment of neurogenic bladder. This protocol targets these primary symptoms. It is implemented with the objective of alleviating them; however, as the disease will inevitably progress, it will be exclusively palliative and necessitate ongoing maintenance, the frequency of which should be discussed with the patient alongside all other complementary therapies being administered.



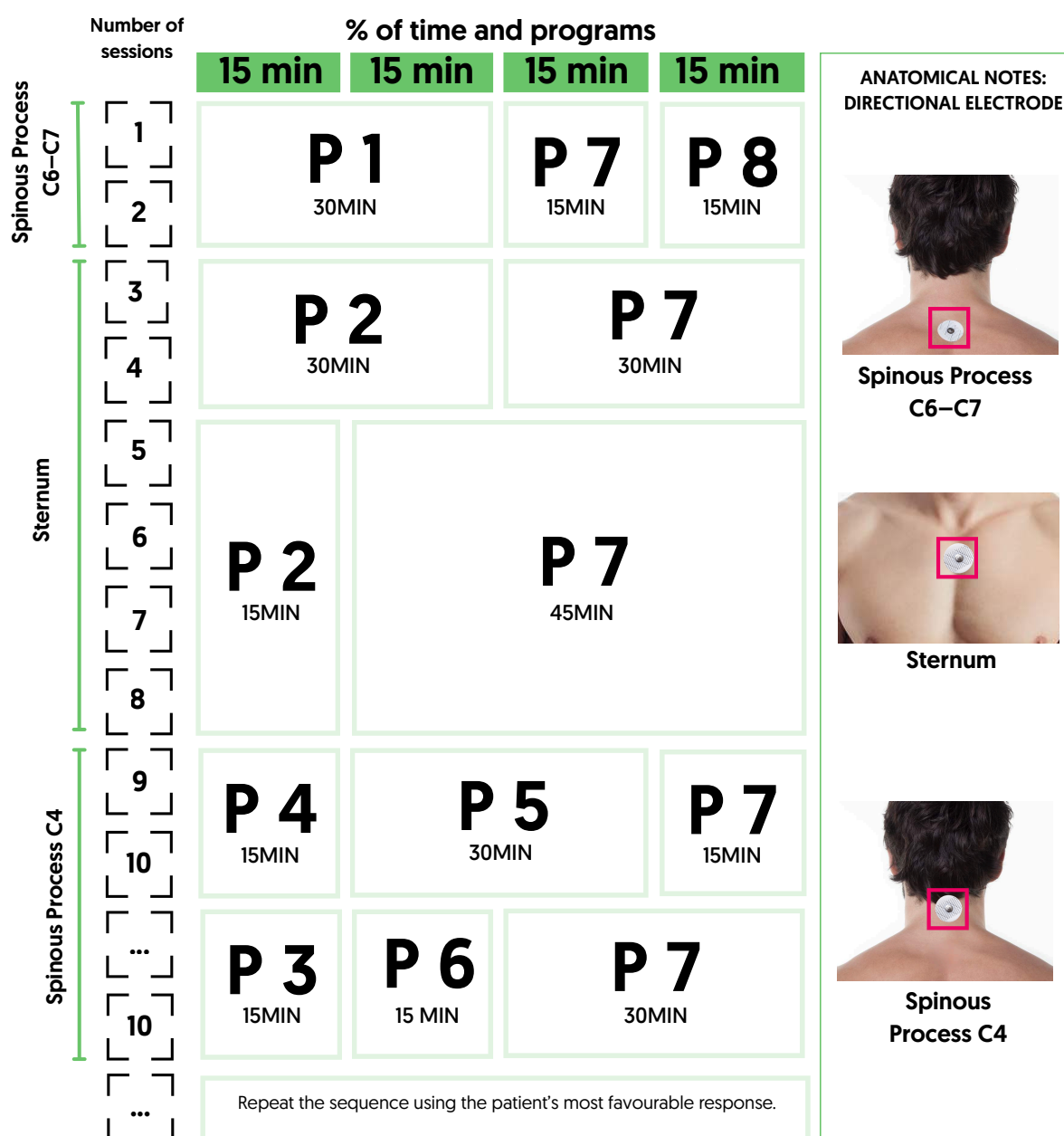


Recommended questionnaires and assessments:

- WeCardio
- Pittsburgh Sleep Quality Index (PSQI)
- EQ-5D
- Lanss

QUALITY OF LIFE IN POST-COVID SEQUELAE

Research on patients experiencing post-COVID-19 sequelae has focused on specific symptoms, including dyspnoea, generalised fatigue, and neuropathic pain. Studies have linked persistent COVID-19 to dysfunction of the autonomic and vagus nerves, which is why this protocol emphasises these aspects. The following protocol describes the configurations used in these studies and recommends their selection based on individual case requirements. For more specific symptoms, transversal protocols may be applied, addressing issues such as sleep disturbances and anxiety. A course of twenty to thirty sessions is recommended to achieve and maintain results. In some cases, a maintenance phase may be necessary.



Recommended questionnaires and assessments:

- WeCardio
- Long COVID Questionnaire

TRIGEMINAL NEURALGIA

Trigeminal neuralgia is characterized by excruciating pain. Numerous patients undergoing neuromodulation are prescribed high-dose medications. The objective, alongside pain alleviation, is to facilitate a reduction in dosage. It is advisable to consider this as a long-term treatment, spanning 3 to 12 months. An initial induction phase with a high frequency of sessions will enhance therapeutic outcomes. The application of Program 9 in high mode should be implemented gradually. Should the patient experience a worsening of symptoms during the focal approach, it is advisable to defer its use. The physician's judgment is informed by which trigeminal branch is eliciting the most significant symptoms.

Number of sessions

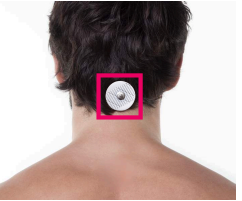
% of time and programs

		15 min	15 min	15 min	15 min
Spinous Process C7	1	P 1 15MIN	P 7 15MIN	P 8 15MIN	
	2				
Spinous Process C4	3	P 2 15MIN	P 6 15MIN	P 7 15MIN	P 8 15MIN
	4				
Mandible	5	P 2 15MIN	P 7 15MIN	P 9 30MIN	
	6				
	7	High P 9 15MIN	P 9 30MIN		
	8				
Localized Discomfort	9	P 4 15MIN	High P 9 15MIN	P 9 30MIN	
	10				
	11	High P 9 30MIN	P 9 30MIN		
	...				
	30	Repeat the sequence using the patient's most favourable response.			

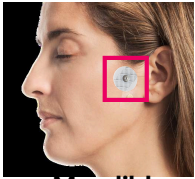
ANATOMICAL NOTES:
DIRECTIONAL ELECTRODE



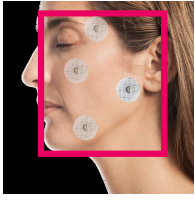
Spinous Process
C6–C7



Spinous
Process C4



Mandible



Localised Discomfort

✓
✓
✓

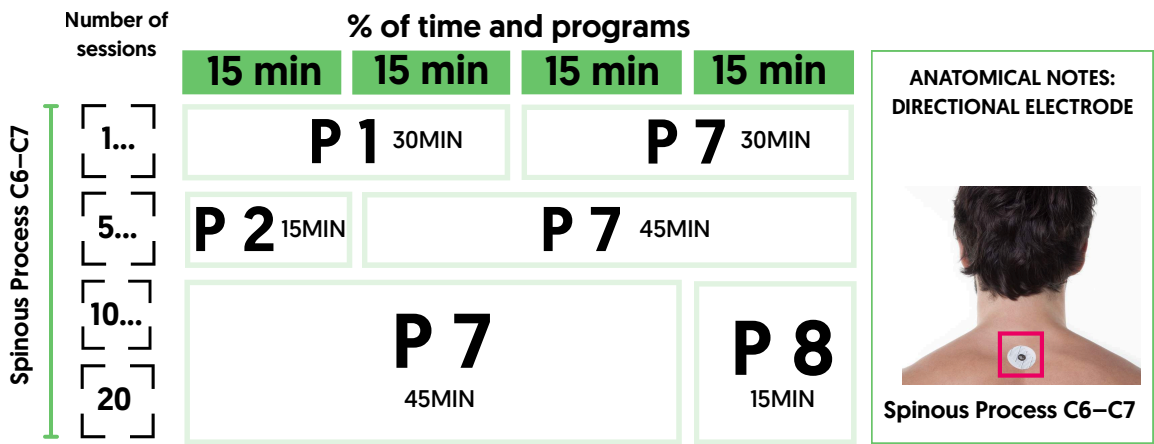
Recommended questionnaires and assessments:

- WeCardio
- LANSS

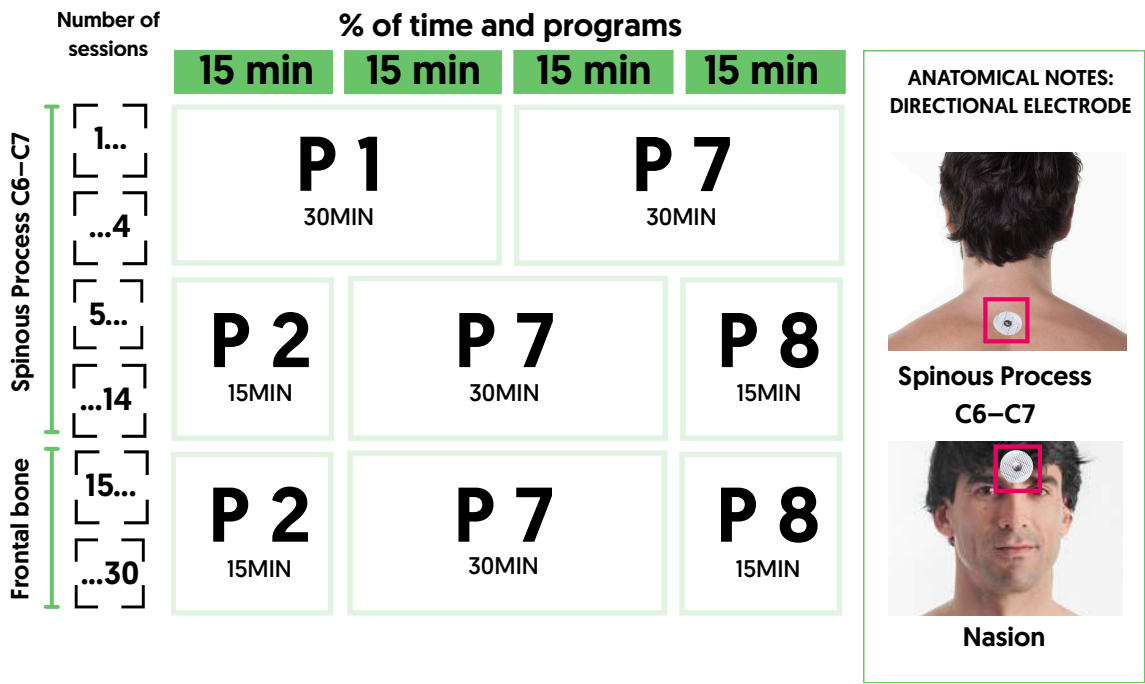
CEREBRAL CONTUSIONS AND SEQUELAE

In this context, two categories of contusion are distinguished: acute contusion, which persists for less than six months, and chronic contusion, referring to the residual effects of a brain injury. The recommended treatment duration for acute cases is 20 to 30 sessions, delivered at a high frequency of three to five sessions per week. For chronic cases, the frequency may range from two to four sessions per week during the induction phase, followed by a maintenance phase tailored to the patient's individual needs.

Management of Acute Cerebral Contusions

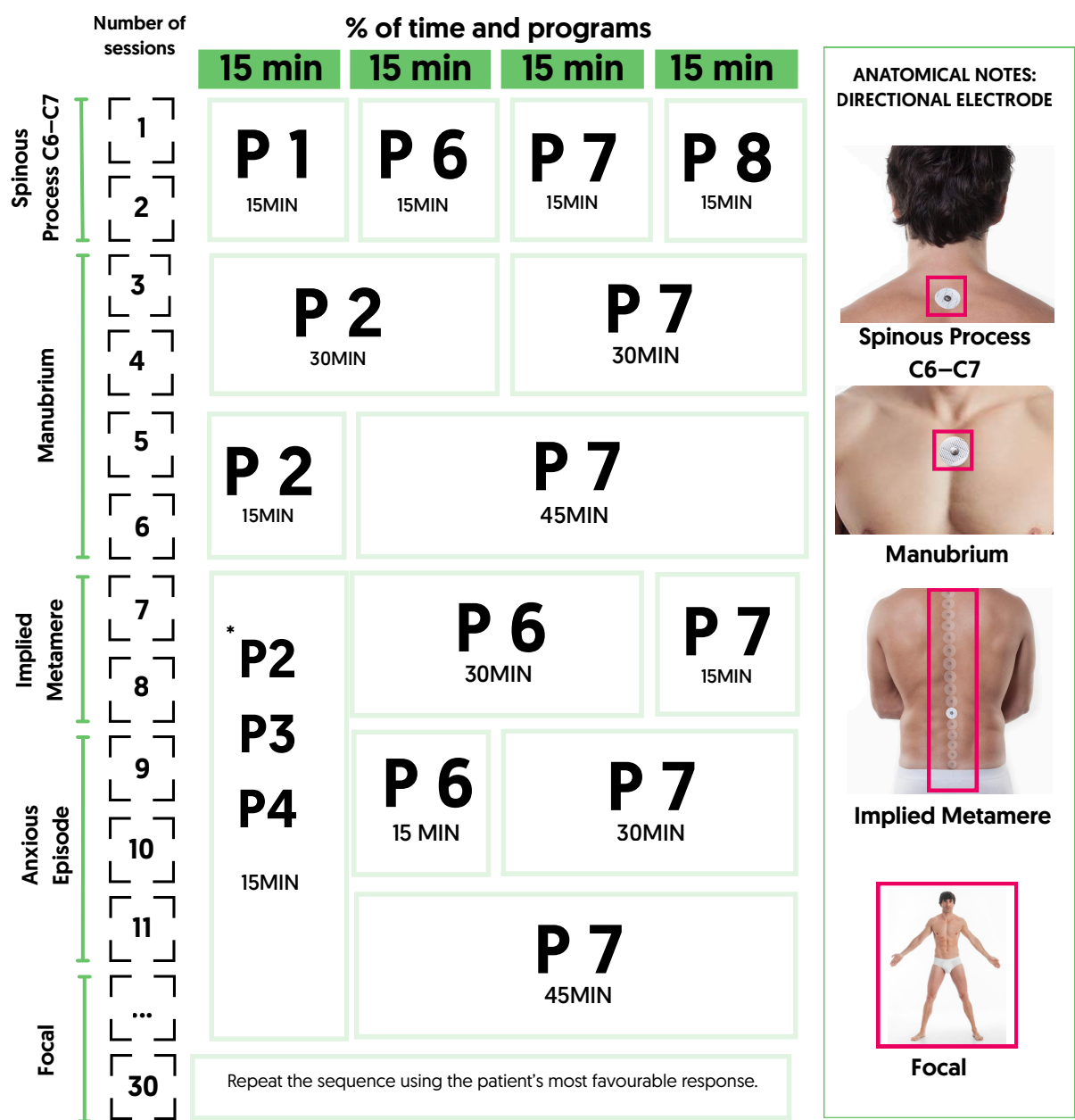


Management of chronic cerebral contusions and their sequelae



IMPROVEMENT IN QUALITY OF LIFE IN PATIENTS WITH NERVE DAMAGE

A nerve laceration or confirmed nerve injury may result in chronic pain that is difficult to manage. Clinical observations have reported cases in which pain intensity decreases or symptom characteristics evolve over time. Even with prolonged treatment, evidence suggests that neuroplasticity can be enhanced, although further scientific validation over time is required. When the affected nerve is identified, the clinician should consider its metameric origin and trajectory, monitoring it with the targeting electrode throughout the treatment period. Cranial nerves are excluded from this protocol. If a particular configuration appears beneficial, it should be replicated for confirmation.



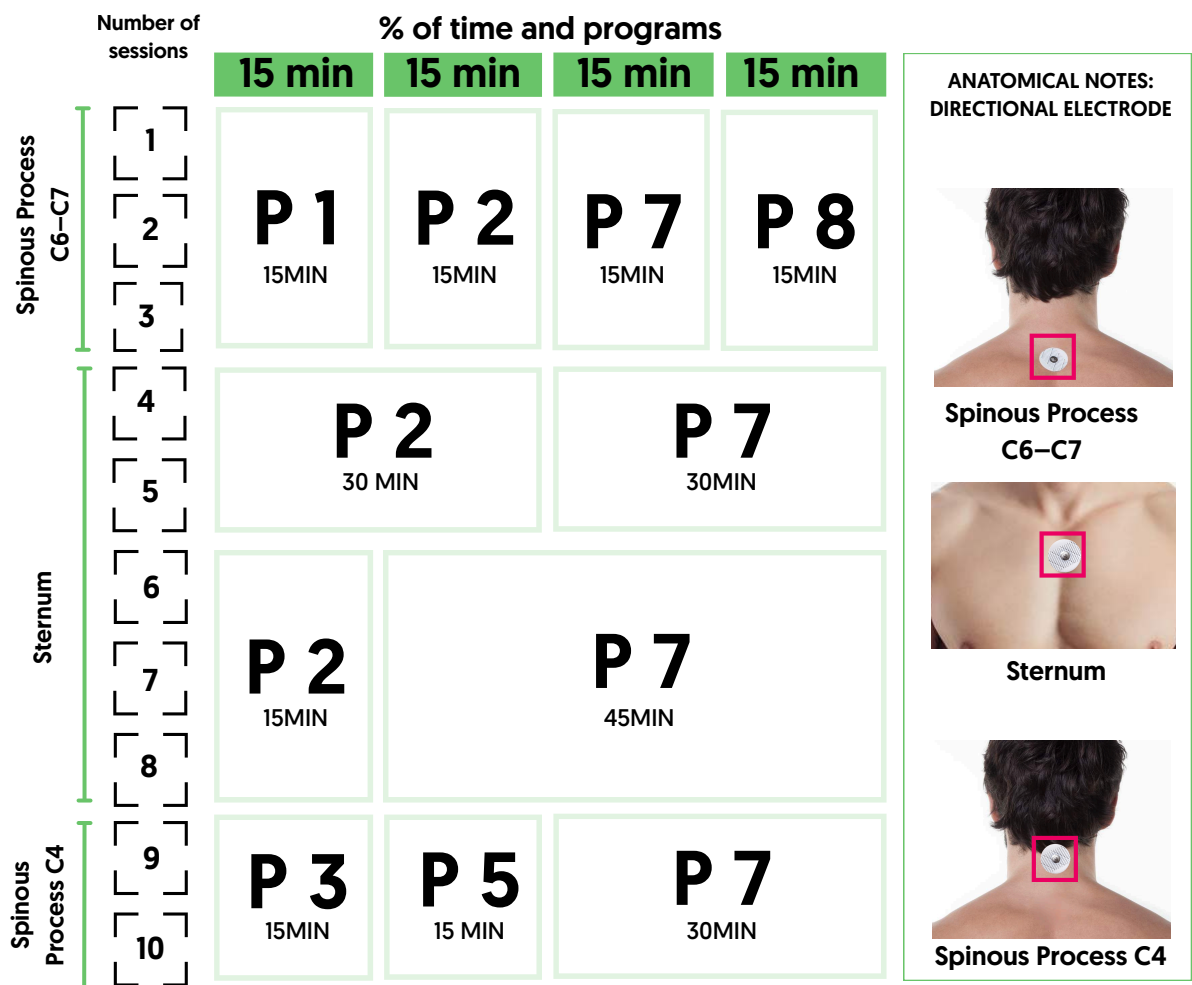
*Select according to the region to be treated [P2 – Ventral, P3 – Dorsal, P4 – Sagittal].

Recommended questionnaires and assessments:

- WeCardio
- Lanss

PREPARATION FOR NEUROSURGERY

Optimising autonomic nervous system function and reducing anxiety levels in patients prior to surgery promote a favourable physiological response. Clinical experience with the application of microcurrents one to two weeks before surgery indicates that this approach improves pain perception and contributes to a smoother progression of inflammatory processes. This protocol may be initiated before surgery and continued in the days following the procedure.





Recommended questionnaires and assessments:

- WeCardio
- GAD-7 (Generalised Anxiety Disorder – 7)

POSTOPERATIVE SPINAL SURGERY

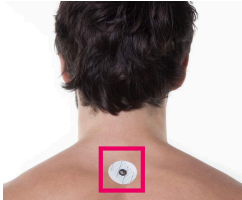
Since 2019, the ICD [International Classification of Diseases] has recognised pain as a distinct pathology, with one of its classifications specifically addressing postoperative pain as an independent condition. Some patients may display inadequate adaptive responses to surgery, even when the procedure itself is deemed successful. This protocol outlines contemporary clinical practices involving the use of microcurrents, which have been shown to facilitate pain reduction upon application, regardless of the patient’s neuropathic characteristics. It is advisable to implement this treatment as soon as possible after surgery as a preventive measure. If this is not feasible, a higher frequency and greater number of sessions should be considered.

Number of sessions

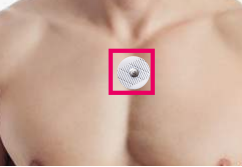
% of time and programs

		15 min	15 min	15 min	15 min
Spinous Process C6–C7	1	P 1 15MIN	P 2 15MIN	P 7 15MIN	P 8 15MIN
	2				
Sternum	3	P 2 15MIN	P 7 45MIN		
	4				
Spinous Process C4	5	P 3 15MIN	P 6 30MIN		P 7 15MIN
	6				
	7	P 3 15MIN	P 6 15 MIN	P 7 30MIN	
	8				
Metamere	9	P 3 15MIN	P 5 15 MIN	P 6 15MIN	P 7 15MIN
	10				
	...	Repeat the sequence using the patient's most favourable response.			

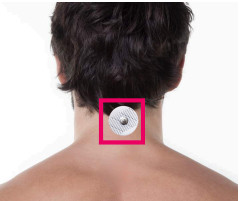
ANATOMICAL NOTES:
DIRECTIONAL ELECTRODE



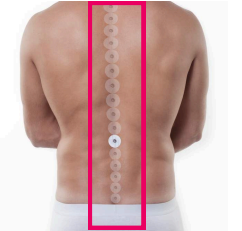
Spinous Process
C6–C7



Sternum



Spinous Process C4



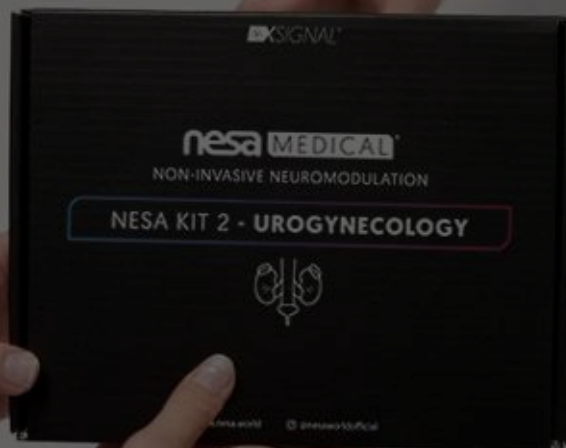
Involved Metamere
(two to five spinal
cord segments
superior to the
surgical site)



Recommended questionnaires and assessments:

- WeCardio

PATIENT KITS



HOW SHOULD I USE THE KITS WITH THE PATIENT?

Objective: To standardise safety, enhance the patient experience, and improve outcomes, while facilitating compliance with the 2nd and 3rd bonus.

1. Assignment and Registration (Initial Visit)

- Provide the patient with a NESA® Kit (gloves and ankle braces) and document it in their medical record [the code/UDI may be recorded in the “treatment-associated material” field].
- Label the bag with the patient’s first and last name, the start date, and the “Single patient – multiple use [ISO 7000-3706]” symbol. This indicates that the bag must not be shared between patients and that repeated use is permitted solely for the same patient.

2. Education in 60 Seconds (Suggested Script)

- “This is your personal kit. It enhances hygiene, comfort, and consistency of stimulation. You will bring it to each session; this approach minimises cleaning time, optimises effective therapy duration, and ensures a uniform sensation with every use.”

3. Expedited Placement and Validation (Per Session)

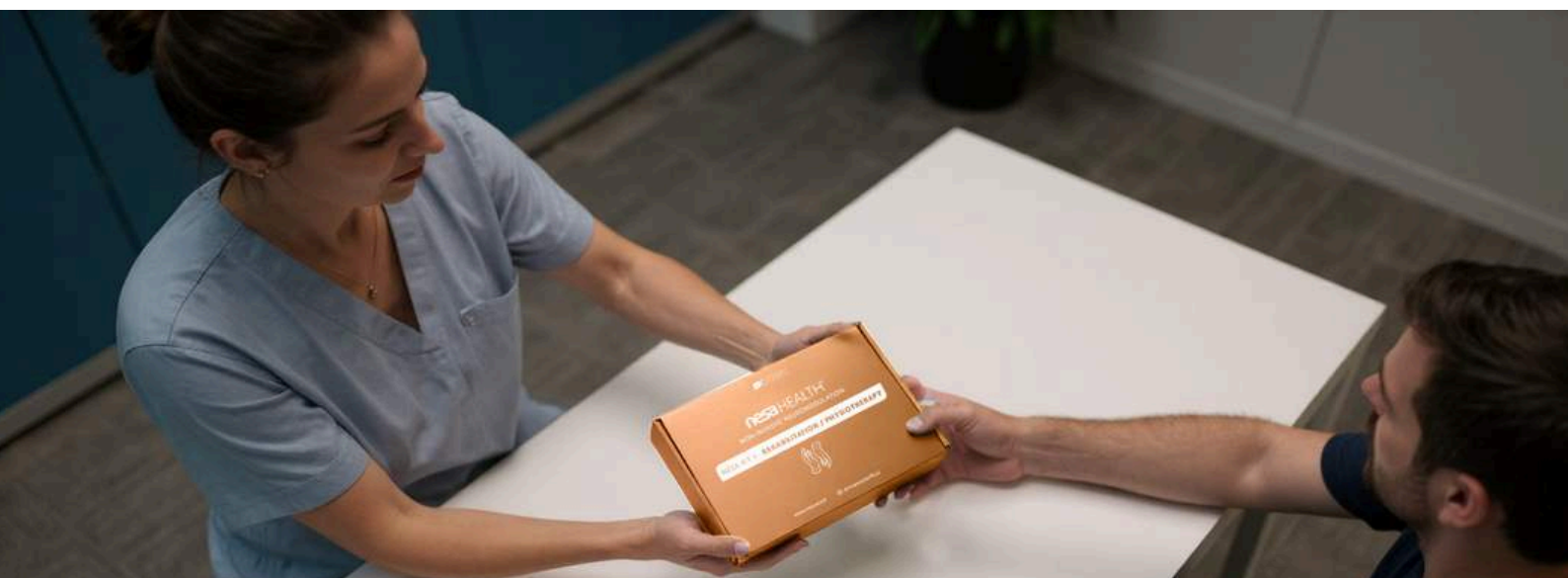
- Perform a skin assessment (no active wounds), adjust the glove/ankle brace, and evaluate moisture/conductivity in accordance with the device’s Instructions for Use.
- If there is an excess of cream or sweat, ensure the area is cleaned and dried to maintain consistent contact.
- Do not share the kit with another patient. If it is forgotten, follow the courtesy kit protocol (single-use or loaner with validated and documented reprocessing) or reschedule the session.

4. Conservation (Between Sessions of the Same Patient)

- Store the kit in the designated bag and inspect for signs of wear. If the material loses elasticity or comfort, replace it.

5. Value Communication (Every Two to Three Sessions)

- Reinforce perceived benefits: “Have you noticed that each session feels increasingly comfortable, with no alteration in sensation? This is due to your personal kit; it allows us to maintain the consistency of the stimulus.”



PATIENT BENEFITS

OF HAVING PERSONAL GLOVES AND ANKLE BRACES

Clinics and adherence

- Enhanced infection control: Prevents reuse between patients, thereby eliminating the need for complex reprocessing and additional validation. It complies with CDC guidelines, which stipulate that any reusable equipment must be cleaned and reprocessed before use on another patient. The implementation of a personal kit mitigates this operational risk.

Clinics and procedures

- Clinical time saved: Eliminates cleaning interruptions between patients, resulting in a more efficient and predictable workflow.
- Technical consistency: Maintaining the same fit and skin contact from session to session fosters a stable perception of the stimulus.
- Fewer incidents: Reduces friction and risk of cross-infection, improves treatment aesthetics, addresses hygiene concerns, and decreases complaints. It also strengthens traceability when the kit is documented in the patient's medical record.

Patient (experience and sentiment)

- Sense of safety and individualised care: "My kit = my health."
- Comfort [self-regulation] and confidence [privacy maintained].
- Active participation: By taking care of their kit, the patient becomes engaged and committed to the treatment plan.

Business (compliance and profitability)

- Immediate compliance and operational bonus: Providing the kit and ensuring a "zero-friction" experience during treatment.
- Enhanced conversion: Improves the perception of quality and consistency [increases satisfaction [reduces negative feedback [reduces unexpected elements]].
- Competitive differentiation: Positions the centre as a beneficiary of the patient's experience.



HOW AND WHEN TO INCORPORATE THE SESSION BONUS?

Indicative model (adjust according to your figures):

Incorporating the kit into the 10-session package extends explanation time by 0.5 to 1 minute during the initial visit, while reducing cleaning and preparation time by 3 to 5 minutes per session. Over 10 sessions, this results in a total time saving of 30 to 50 minutes in scheduling (equivalent to approximately 0.5 to 1 additional slot per package). If the billable hour is €60 or more, the time saved effectively offsets the cost of the kit while increasing capacity. Moreover, a 10–20% increase in renewals following the second package has a direct positive impact on lifetime value [LTV].

Rationale for incorporating the Individual Kit in the initial voucher (text prepared for your document)

1. Adherence to regulations and best practices

Complies with MDR [GSPR 10–11–23] and infection control guidelines, which mandate thorough reprocessing before reusable equipment is used on a different patient. Assigning a kit to an individual patient streamlines and reinforces compliance. [In Spain: refer to RD 192/2023, Chapter III].

2. Safety and hygiene in patient care

Reduces the risk of cross-contamination and hygiene-related issues, while enhancing patient confidence and acceptance of treatment from the first session. [CDC].

3. Ensuring the quality and consistency of the stimulus

By consistently using the same kit for the same patient, the fit and feel remain uniform, providing a more stable experience and improving the patient's perception of efficacy.

4. Distinction and allegiance

Personalised service, a perception of innovation, and a premium protocol foster renewals [second and third vouchers] as well as word-of-mouth recommendations.

How can I incorporate the kit into the treatment voucher price?

- Preferred Option [Straightforward and Effective]
- 10-session voucher, including the assessment session and kit.
- Automatic discount on the second and third vouchers (e.g., –X€, as the kit is already provided).
- Policy displayed at reception and included in the informed consent form: “A personal kit is included with your first voucher. Please bring your kit to each session.”

TEAM CHECKLIST

- ☐ Deliver and document the kit in the patient's medical record.
- ☐ Provide a 60-second explanation of use and care; the patient acknowledges understanding and confirms that it is personal.
- ☐ Ensure prompt placement and perform a skin check prior to each session.
- ☐ If the patient forgets to bring their kit, apply the documented courtesy protocol (no sharing).
- ☐ A discount or benefit is available on the second and third vouchers for bringing the kit.

REGULATIONS

MDR

CLICK



CDC (United States)

CLICK



EURO-Lex

CLICK



BOE (Spain)

CLICK



IMPORTANT LINKS

NESA® CAMPUS: <https://nesacamp.thinkific.com/>

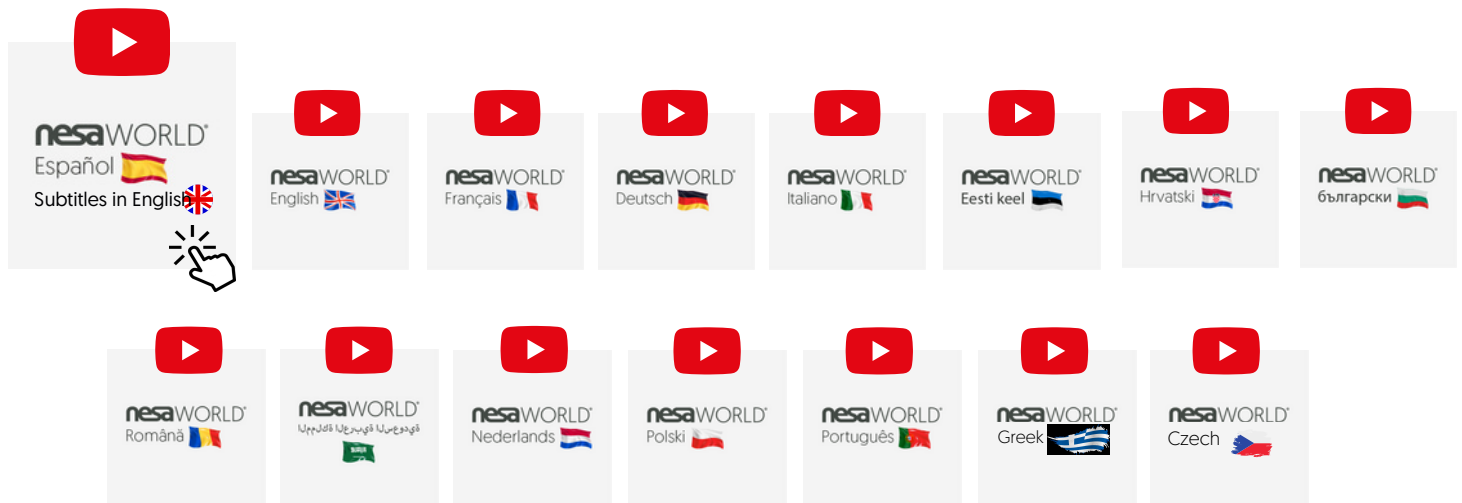


On Campus, you will find:

- SharePoint NESA®: provides all the documents, videos, and images required for daily use.
- NESA® Introductory Campus: designed to assist you in developing clinical reasoning with your patients, thereby supporting up to 70% of clinical outcomes.
- Clinical Guidelines Platform: featuring a search engine to access clinical reasoning for a variety of cases.
- Guide for Initiating Patient Engagement.
- Specialty-Specific Webinars and Clinical Reasoning.
- Monographic Training by Specialisation.
- Engagement with the Clinical Department and Customer Service.

If you are a NESAWORLD® customer and do not have your passwords, please request them from your distributor or directly from NESAWORLD®.

YOUTUBE CHANNELS



FAQs: Frequently Asked Questions and Responses

1. Technical FAQs [CLICK HERE](#)
2. Physiology FAQs [CLICK HERE](#)
3. Scientific Evidence FAQs [CLICK HERE](#)
4. Clinical FAQs [CLICK HERE](#)
5. Patient FAQs [CLICK HERE](#)
6. Training and Events FAQs [CLICK HERE](#)

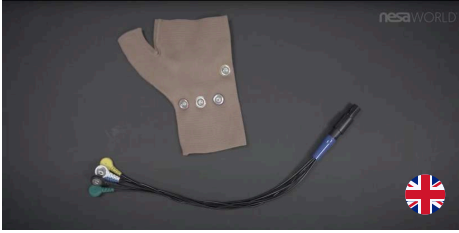
LINKS OF INTEREST



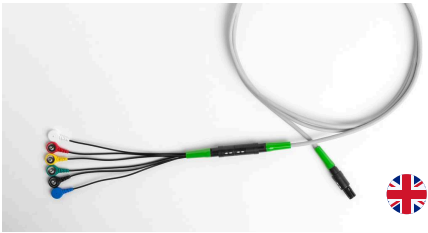
1. PROGRAMMING THE NESA XSIGNAL®
(Essential – 3 minutes)



2. HOW TO WEAR GLOVES AND ANKLE BRACES
(Important – 2 minutes)



3. HOW TO ADJUST GLOVE AND
ANKLE BRACE SIZES



4. CABLE PLACEMENT PROCEDURES
(Important – 1 minute)



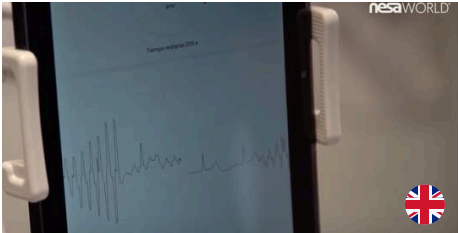
5. METHODS FOR SECURING CABLES DURING
OPERATION (Important – 1 minute)



6. INSTRUCTIONS FOR USING THE
INTERNATIONAL BATTERY CHARGER



HOW TO SUBMIT AN APPLICATION TO
NESA®

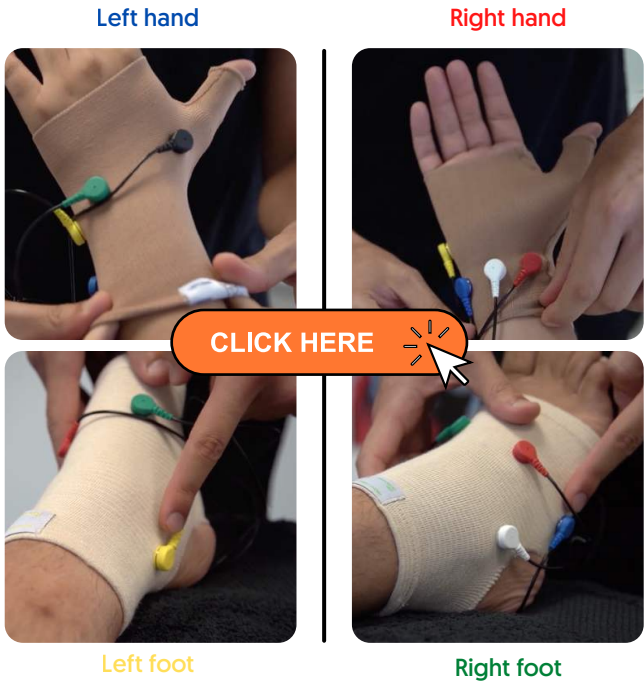


HOW TO USE THE NESA XSIGNAL® AND
THE WECARDIO ELECTROCARDIOGRAPH



AM I ON THE CLINIC WEBSITE?

[CLICK HERE](#)



www.nesaclinics.com



A person is shown from the back, wearing a dark blue polo shirt. Their hair is tied up in a bun. The background is dark with some light streaks. The shirt has the 'nesaWORLD' logo and social media icons printed on it.

nesaWORLD®



www.nesa.world