NEUROPSYQUE®

HEALTHY BRAIN,
HEALTHY LIFE

qEEG BRAIN MAPPING & NEUROFEEDBACK:

WHAT ARE THEY? / FREQUENTLY ASKED QUESTIONS

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INDEX

1 WHAT IS QEEG BRAIN MAPPING? 03

- WHAT DOES IT ASSESS?
- HOW DOES IT WORK?
- IN WHICH CASES IS IT NEEDED?
- RELEVANT INFORMATION

2 WHAT IS NEUROFEEDBACK? 05

- WHAT DOES IT TRAIN?
- HOW DOES IT WORK?
- IN WHICH CASES IS IT APPLIED?
- RELEVANT INFORMATION

3 EXPECTED RESULTS - NEUROFEEDBACK 07

4 THERAPEUTIC PROCESS - NEUROFEEDBACK 08

5 FREQUENTLY ASKED QUESTIONS 10

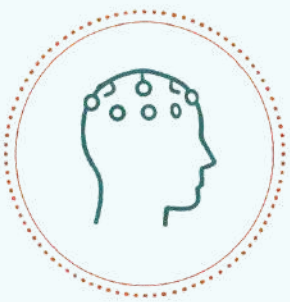
1

WHAT IS QEEG BRAIN MAPPING?

qEEG (Quantitative Electroencephalogram) is an exam that measures the electrical activity of different areas of the brain. It provides a "functional map", by comparing results with reference values, helping to understand brain functioning patterns and how those patterns are reflected in behaviour, reported difficulties and symptoms.

1. WHAT IT ASSESSES

Neurophysiological functioning patterns, captured across the entire brain structure in the form of electrical activity. It measures different types of brain waves, allowing the detection of abnormalities and planning of future interventions.



2. HOW IT WORKS

Small electrodes are placed on the scalp, and the exam takes a few minutes. The data is then analysed by specialised software and interpreted by our specialists.

3. IN WHICH CASES IS IT HELPFUL

At NeuroPsyque, qEEG is used as a complementary diagnostic tool, supporting the clinical assessment of symptoms across the entire neuropsychiatry spectrum, and also within Neurofeedback therapeutic programmes.

QEEG
-RELEVANT INFORMATION-

CAN I SCHEDULE A QEEG DIRECTLY WITHOUT A CLINICAL APPOINTMENT?

It should always be integrated within a clinical evaluation. If you wish to have the exam done independently, with a medical prescription, that is possible.

DOES THE QEEG "SEE" THE BRAIN?

QEEG

Measures the brain's electrical activity and helps to understand how the brain is functioning.

VS

MRI

Shows the brain's structure and anatomy. These are different and complementary exams.

WHAT IS THE DIFFERENCE FROM AN MRI?

IS THE QEEG SAFE? DOES IT CAUSE PAIN? ARE THERE SIDE EFFECTS?

Completely safe. It is a non-invasive and painless exam that rarely presents side effects.

DO I NEED ANY PREPARATION BEFORE THE EXAM?

It is recommended to arrive with clean, dry hair, free of gel or oils. Specific guidance may be given regarding sleep, caffeine, or medication.

IS THE QEEG ENOUGH TO DEFINE A TREATMENT?

No. The qEEG is a complementary diagnostic tool. The results must be interpreted together with the clinical history and symptoms, within an evaluation carried out by a specialised professional.

2

WHAT IS NEUROFEEDBACK?

Neurofeedback is a neurotherapy that allows the observation of brain activity and acts on behaviour in real time. The patient receives visual or auditory stimuli that reinforce healthy brain patterns and discourage dysfunctional ones. It works like a "gym for the brain," training the brain to self-regulate.

1. WHAT IT TRAINS

Neurofeedback trains the brain to self-regulate neurophysiological patterns related to attention, activation, relaxation, and emotional stabilisation. The goal is healthier, more consistent, and adaptive functioning.

2. HOW IT WORKS

During the session, sensors placed on the scalp record brain activity. This information is processed and immediately transformed into visual and/or auditory feedback, in real time.

3. IN WHICH CASES IS IT APPLIED

Neurofeedback can be integrated into therapeutic programmes targeting a wide range of symptoms and functional complaints — difficulties with focus, anxiety, stress, sleep disturbances, emotional self-regulation, among others. The protocol is always personalised to each individual's profile.

NEUROFEEDBACK -RELEVANT INFORMATION-

CAN I START NEUROFEEDBACK WITHOUT A PRIOR ASSESSMENT?

No. At NeuroPsyque, Neurofeedback is integrated into an individualised therapeutic plan. The clinical assessment and qEEG brain mapping are carried out before the first session, in order to plan the treatment safely.

CAN NEUROFEEDBACK REPLACE MEDICATION?

WHAT IS THE DIFFERENCE BETWEEN THE TWO?

NEUROFEEDBACK

Acts directly on behaviour through real-time feedback, in a progressive manner.

VS

MEDICATION

Acts chemically in the body and can help control symptoms. It can be used in parallel, but should be carefully monitored.

IS NEUROFEEDBACK SAFE? DOES IT CAUSE PAIN? ARE THERE SIDE EFFECTS?

It is a non-invasive and painless treatment. If side effects occur, they are mild and generally appear and are addressed in the first sessions.

DO I NEED ANY PREPARATION BEFORE THE SESSIONS?

Clean, dry hair, free of gel or oils. Other specific guidance may be given regarding sleep, caffeine, or daily routine on session days.

DO I NEED TO "KNOW HOW TO CONTROL" MY BRAIN?

No. Neurofeedback does not necessarily require intense mental effort or any special technique on your part. The training works through adaptation and practice, via gradual improvements. The brain's neuroplasticity will make each future session easier.

3

EXPECTED RESULTS -NEUROFEEDBACK-

1. GREATER FOCUS

+ CONCENTRATION
+ CLARITY
+ ORGANIZATION

2. BETTER EMOTIONAL REGULATION

− STRESS
− ANXIETY

3. SLEEP, ENERGY AND RECOVERY

− FATIGUE
+ AVAILABILITY

4. BETTER PERFORMANCE

+ SELF-REGULATION
+ CONSISTENCY
− FRUSTRATION

5. GRADUAL AND CONTINUOUS PROGRESS

+ CONTROL
+ WELL-BEING

IMPORTANT

NEUROFEEDBACK DOES NOT PRODUCE INSTANT CHANGES.

Although it is a **highly effective** treatment, Neurofeedback **does not have an immediate effect** like some pharmacological treatments. **Results are progressive** and should be closely monitored by specialists.

4

THERAPEUTIC PROCESS -NEUROFEEDBACK-

1. INITIAL APPOINTMENT

Detailed knowledge and analysis of the clinical case (anamnesis); application of pre-assessment psychological instruments; explanation of the Neurofeedback technique and the next steps.

2. QUANTITATIVE ELECTROENCEPHALOGRAM (QEEG) – BRAIN MAPPING

Neurophysiological exam to assess the brain's electrical activity and define the personalised intervention protocol.

3. RESULTS FEEDBACK APPOINTMENT

Delivery and analysis of the qEEG results and cognitive training plan, with indication of the number of Neurofeedback sessions (between 10 and 15 in the first phase). Includes: results report; personalised intervention plan.

4. START OF INTERVENTION PROTOCOL

Neurofeedback sessions. Duration: 45 minutes each. Number of sessions: between 10 and 15, according to the defined protocol.

5. INTERMEDIATE REASSESSMENT

After the 10th or 15th session: a new Quantitative Electroencephalogram (qEEG) is performed; appointment to analyse results and adjust the protocol if necessary.

6. CONTINUATION OF INTERVENTION PROTOCOL (2ND PHASE)

Scheduling of a new series of 10 to 15 Neurofeedback sessions.

7. FINAL ASSESSMENT

At the end of the therapeutic journey: performance of the 3rd qEEG; appointment for delivery and analysis of the final results report.

5

FREQUENTLY ASKED QUESTIONS

BRAIN MAPPING – QEEG

1. Can qEEG help identify the origin of the symptoms?

- Yes. qEEG can help identify brain functioning patterns that allow specialists to gain a deeper understanding of the root of symptoms, and greater clarity about which therapeutic methods to use in treatment.

2. Can qEEG help understand persistent symptoms with no clear explanation?

- In some cases, yes. qEEG can reveal deep functional changes in brain activity, even when other exams show no evident alterations.

3. Is qEEG effective at all ages?

- Yes. qEEG can be performed on children, adolescents, adults, and the elderly. The interpretation of results is always adapted to the age and clinical context of each person.

4. Can qEEG be influenced by stress or anxiety at the time of the exam?

- Yes. Stress, anxiety, fatigue, sleep, or caffeine can influence brain activity at the time of the exam. For this reason, these factors are taken into account when analysing the results.

5. How are qEEG results analysed?

- The results are analysed using specialised software, and interpreted by clinical professionals, by comparing the observed brain patterns with normative databases appropriate to the patient's age.

6. What does "brain dysregulation" mean?

- "Dysregulation" means that certain brain areas or neural networks may be functioning in a less balanced or efficient way, which can be associated with cognitive, emotional, and behavioural pathological symptoms.

7. What does "hyperactivity" or "hypoactivity" in specific brain areas mean?

- It means that certain brain areas show activity above or below what is expected. Depending on the region involved, this can be related to difficulties with attention, anxiety, impulsivity, mental fatigue, among other manifestations.

8. What types of brain waves are measured in qEEG?

- qEEG measures different types of brain waves, such as delta, theta, alpha, beta, and gamma. Each is associated with different states of brain functioning, such as relaxation, attention, sleep, or cognitive processing.

9. Can qEEG predict the response to the treatment?

- qEEG can provide useful information to personalise treatment and guide clinical decisions, but it cannot predict outcomes with complete certainty. As with all therapeutic methods (such as medication), there are many variables at play that ultimately determine the success and durability of treatment.

NEUROFEEDBACK

1. Does Neurofeedback work through electrical or magnetic stimulation?

- No. Neurofeedback does not stimulate the brain with electricity or magnetism, as is the case with TMS or tDCS. The technology is based on monitoring and collecting information, helping the brain to self-regulate through adaptation to stimuli during training.

2. Are the improvements achieved permanent? Can the brain "unlearn" after finishing Neurofeedback?

- The vast majority of people maintain long-term improvements, especially when the training is well targeted and integrated within clinical follow-up. However, results can always vary from person to person.

3. Is Neurofeedback effective at all ages?

- Yes. Neurofeedback can be used in children, adolescents, adults, and the elderly, with the protocol adapted to the characteristics and needs of each person.

4. Does Neurofeedback improve cognition?

- In some cases it can contribute to improvements in areas such as attention, concentration, mental processing, self-regulation, and yes, also general cognitive performance.

5. Does Neurofeedback change personality, emotions, or memory?

- The goal of Neurofeedback is not to change personality, but rather to promote more balanced and efficient brain functioning. Some people report significant improvements in emotional stability, mental clarity, and concentration ability.

6. Are there contraindications for Neurofeedback?

- Neurofeedback is generally considered safe and well tolerated. There are no specific stated contraindications. Even so, each case should always be assessed individually by qualified professionals.

7. Can I carry on with my normal life after a session?

- Yes. In most cases, it is possible to immediately resume normal daily activities after the session.

8. Can two people with the same symptoms need different protocols? Can similar symptoms have different brain origins?

- Yes. People with similar symptoms can present considerably different brain patterns. That is why individual assessment and qEEG are important for personalising the Neurofeedback protocol and adapting the treatment to the specific needs of each "brain."

FIND MORE INFORMATION AT:

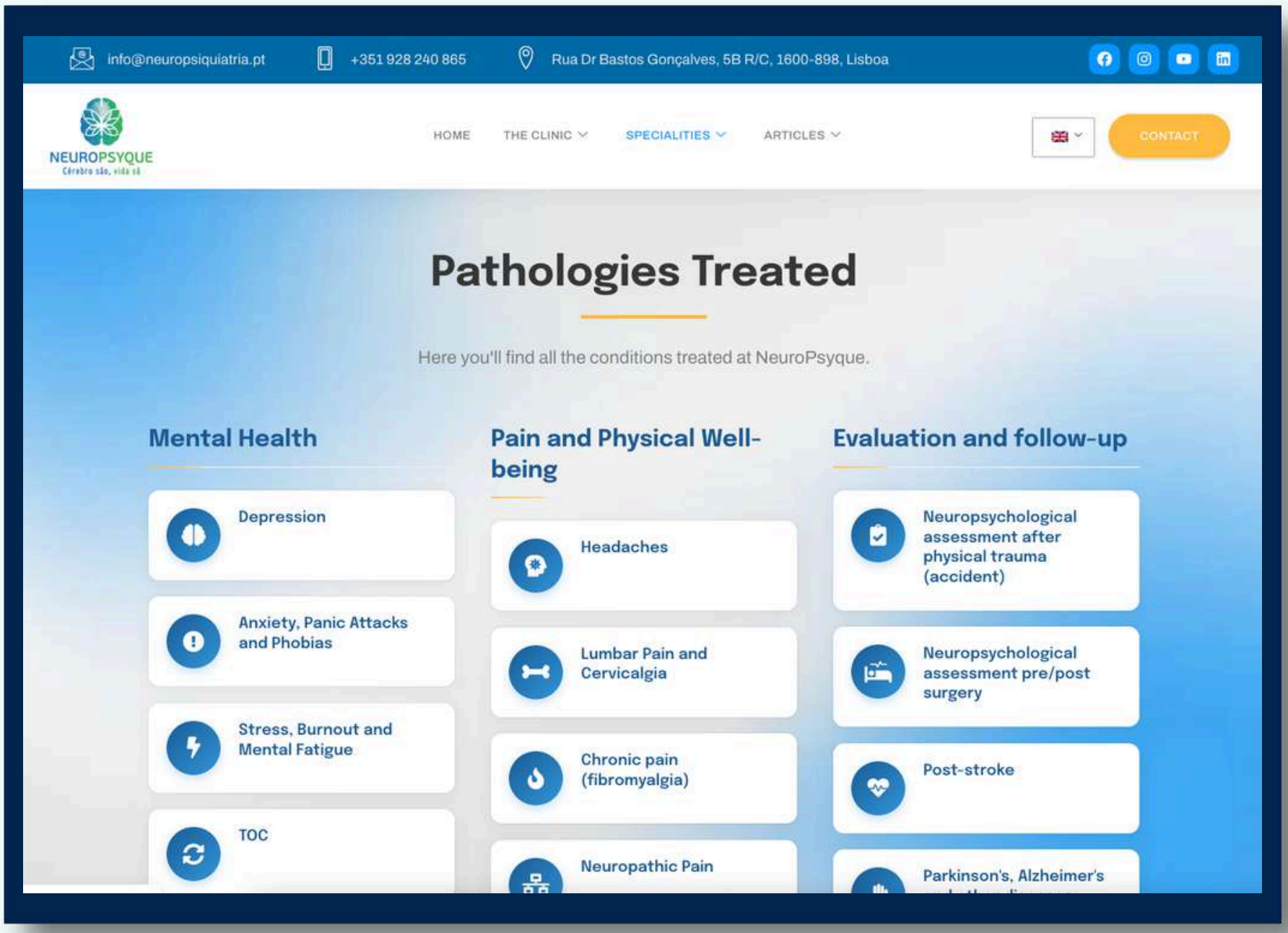
WWW.NEUROPSIQUIATRIA.PT/NEUROFEEDBACK-E-QEEG

qEEG & Neurofeedback

NEUROPSYQUE®

HEALTHY BRAIN,
HEALTHY LIFE

LOOKING TO TREAT A SPECIFIC CONDITION? FIND IT, ALONG WITH OUR SPECIALIZED APPROACH, AT:



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