# Four-session treatment for specific phobias: Memory regression as a therapeutic tool

# for blood phobia

Tratamiento de cuatro sesiones para fobias específicas: Regresión de la memoria como herramienta

terapéutica para la fobia a la sangre

Tratamento de quatro sessões para fobias específicas: Regressão de memórias como ferramenta

terapêutica para fobia de sangue

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# Abstract

This study addresses the effectiveness of memory regression as a therapeutic method for individuals with bloodinjection-injury (BII) phobia, a condition that manifests itself through extreme fear and avoidance of seeing blood, receiving injections, or being present in invasive medical situations. Differentiated from other phobias by its unique physiological response, including fainting, and the feeling of disgust, BII significantly impacts patients' lives, limiting access to essential medical care and influencing professional and lifestyle choices. The prevalence of this phobia ranges from 0.8 to 1.5% among children and adolescents, reaching 3 to 4.5% in adults, but its therapeutic approach is often neglected in the specialized literature. This article explores memory regression as a promising intervention, suggesting that by revisiting and reinterpreting the past traumatic experiences that underlie the phobia, patients can achieve a deeper understanding and resolution of their fears. Preliminary regression as a valuable tool in the therapeutic arsenal for the treatment of IBD. This study contributes to the field of psychotherapy by providing insights into the applicability and efficacy of memory regression, emphasizing the importance of innovative approaches in the treatment of specific phobias.

Keywords: Blood injection phobia; Memory regression; Treatment; Physiological response; Anxiety; Therapy.

# Resumen

Este estudio aborda la eficacia de la regresión de memoria como método terapéutico para individuos con fobia a la sangre-inyección-lesión (BII), una condición que se manifiesta a través del miedo extremo y la evitación de ver sangre, recibir inyecciones o estar presente en situaciones médicas invasivas. Diferenciada de otras fobias por su respuesta fisiológica única, que incluye el desmayo, y la sensación de asco, la BII afecta significativamente a la vida de los pacientes, limitando el acceso a la atención médica esencial e influyendo en las elecciones profesionales y de estilo de vida. La prevalencia de esta fobia oscila entre el 0,8 y el 1,5% entre niños y adolescentes, alcanzando entre el 3 y el 4,5% en adultos, pero su abordaje terapéutico es a menudo desatendido en la literatura especializada. Este artículo explora la regresión de memoria como una intervención prometedora, sugiriendo que revisitando y reinterpretando las experiencias traumáticas pasadas que subyacen a la fobia, los pacientes pueden lograr una comprensión más profunda y la resolución de sus miedos. Los resultados preliminares indican una reducción significativa de la ansiedad y la evitación fóbica, lo que demuestra el potencial de la regresión de memoria como herramienta valiosa en el arsenal terapéutico para el tratamiento de la EII. Este estudio contribuye al campo de la psicoterapia aportando ideas sobre la aplicabilidad y eficacia de la regresión de la memoria, subrayando la importancia de los enfoques innovadores en el tratamiento de las fobias específicas.

**Palabras clave:** Fobia a inyectarse sangre; Regresión de memoria; Tratamiento; Respuesta fisiológica; Ansiedad; Terapia.

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#### Resumo

Este estudo aborda a eficácia da regressão de memórias como método terapêutico para indivíduos com fobia de sangue-injeção-ferimento (BII), uma condição que se manifesta através de medo extremo e evitação de ver sangue, receber injeções, ou estar presente em situações médicas invasivas. Diferenciando-se de outras fobias pela sua resposta fisiológica única, incluindo desmaios, e pelo sentimento de nojo, a BII impacta significativamente a vida dos pacientes, limitando o acesso a cuidados médicos essenciais e influenciando escolhas profissionais e de estilo de vida. A prevalência desta fobia varia de 0,8 a 1,5% entre crianças e adolescentes, chegando a 3 a 4,5% em adultos, mas sua abordagem terapêutica é frequentemente negligenciada na literatura especializada. Este artigo explora a regressão de memórias como uma intervenção promissora, sugerindo que, ao revisitar e reinterpretar as experiências traumáticas passadas que fundamentam a fobia, os pacientes podem alcançar uma compreensão mais profunda e uma resolução de seus medos. Os resultados preliminares indicam uma redução significativa na ansiedade e na evitação fóbica, demonstrando o potencial da regressão de memórias como uma ferramenta valiosa no arsenal terapêutico para o tratamento da BII. Este estudo contribui para o campo da psicoterapia ao fornecer insights sobre a aplicabilidade e eficácia da regressão de memórias, enfatizando a importância de abordagens inovadoras no tratamento de fobias específicas.

Palavras-chave: Fobia de sangue-injeção-ferimento; Regressão de memória; Tratamento; Resposta fisiológica; Ansiedade; Terapia.

#### 1. Introduction

Anxiety-related disorders, such as generalized anxiety, panic attacks, fear of open spaces (agoraphobia), excessive fear in social interactions (social phobia) and occasional fears or specific phobias, tend to be more common in adults compared to other types of psychological problems (Eaton et al., 2008; Eaton et al., 2018). This serious psychiatric condition affects up to 6% of the population throughout their lives and can have a chronic course if not treated properly, resulting in significant disability and social impact. Sometimes, the complexity of its clinical picture is intensified by the presence of comorbidities, including major depression, panic disorder and substance abuse, which worsen outcomes and hinder treatment effectiveness (Maron et al., 2017; Eaton et al., 2008; Eaton et al., 2018).

Specific phobia, also known as simple phobia, is a type of anxiety disorder marked by a disproportionate, intense and continuous fear, either in the presence of or in anticipation of facing a specific object or scenario. This fear almost always leads to an immediate anxiety reaction, as described in the DSM-V in 2013. This manual classifies specific phobia into five categories: animals, phenomena of nature, blood-injections-ferments (BIS), situations and other types. Specific phobias are the most common anxiety disorders, ranking among the most prevalent psychiatric conditions in the general population, affecting approximately 12.5% of people (Garcia et al., 2017; Linares et al., 2012).

The need for the subject to admit their phobia as something irrational highlights the importance of insight in diagnosis, pointing to the clinical interview or self-report in surveys (as seen in most of the studies mentioned) as effective diagnostic methods. Diagnosing specific phobias can be relatively simple, requiring only a few questions. For example, the initial question on specific phobias in the revised third edition of the Diagnostic Interview Manual (Robins et al., 1989), used in the Epidemiological Catchment Area study (Eaton et al., 1981), focuses on fear and avoidance (for example, in cases of phobia of blood or injections, "have you ever experienced an irrational fear of seeing blood, receiving an injection or visiting the dentist, to the point of trying to avoid these situations?"). A second question investigates the duration of this fear (for example, "does this fear persist for months or years?"), followed by questions about any resulting impairments or limitations, such as the need to seek medical help, use medication or absence from work (Eaton et al., 2018).

The phobia of blood, injections and injuries is a chronic and limiting type of specific phobia that affects individuals of all ages, but is one of the least understood. It is characterized by extreme fear and avoidance of situations involving blood, injuries or invasive medical procedures. This fear can lead to serious health consequences, as those affected tend to avoid medical appointments, immunizations, treatments and even certain professions or trips due to the fear of vaccination. Distinct from other phobias, this disorder provokes a particular physiological response, such as fainting, and is linked to a feeling of

disgust, an aspect also observed in phobias of small animals, such as arachnophobia. Despite its relevance and prevalence, which ranges from 0.8 to 1.5% in children and adolescents and from 3 to 4.5% in adults, clinical investigation, assessment and treatment of phobia of blood, injections and wounds are still scarce in the specialized literature (Oar et al., 2015).

This article describes the case of a 24-year-old patient who had a specific phobia of blood, a condition which caused her to experience pressure drops and fainting spells when she came across blood. Here, we detail the therapeutic process using the technique of memory regression under hypnosis, exploring the development, implementation and results of the treatment over 11 months after completion.

## 2. Case Report and Methodology

The patient, a 24-year-old woman, sought treatment for her blood-injection-injury (BII) phobia through an online therapy modality. The RB7 treatment, consisting of an anamnesis session followed by three memory regression sessions, was chosen to address her problem. During the anamnesis, the patient shared remarkable episodes from her life, including fainting when cutting herself with a hoe and during blood collection procedures.

These experiences, compounded by bullying at school, contributed significantly to her phobia. In the first regression session, two significant memories were accessed and worked on: one at the age of 7, in a hospital, where she felt an intense fear of dying; and another at the age of 16, during a blood draw. The technique of updating memories was applied to alter the perception of these events, providing a new meaning and emotional reference.

Despite an initial improvement, the patient still reported discomfort when encountering blood. The second regression revisited the memory from the age of 7, which had not yet been fully updated, and explored a new memory from the age of 5, related to the fear of being alone, which was intrinsically linked to her phobia.

The therapeutic work on this new memory generated significant changes in the patient's perception of blood. The patient reported notable improvements in her ability to deal with blood, including an emergency situation at work and carrying out blood tests without anxiety. These reports were complemented by positive feedback six days, three months and eleven months after the last regression session, highlighting a profound transformation in her emotional and behavioral response towards blood.

The case illustrates the potential of hypnotherapy with memory regression in the treatment of specific phobias. The approach focused on the emotional origin of the behaviors, rather than just the symptoms, and enabled lasting behavioral change. This case report reinforces the effectiveness of hypnotherapy as a valuable tool in the treatment of complex emotional conditions, offering a new perspective on the possibilities for managing and overcoming them. This article is based on Cohen's methodology.

The case was reported after signing an informed consent form and is in accordance with Brazilian legislation and Resolution 466/2012, as well as the principles of the research ethics committee and the CONEP/2018 charter.

## 3. Discussion

The results of this research highlight the effectiveness of memory regression therapy in the treatment of specific blood-injection-boiling (BII) phobia, a subtype of specific phobia that provokes a distinct physiological response and intense aversion. The therapy focused on identifying and reprocessing past traumatic events that are at the root of the patient's irrational fear, allowing a reinterpretation of past experiences and a significant reduction in phobic symptoms. In addition, the technique has proven to be a promising approach in reducing the behavioral avoidance that BII patients often exhibit, such as fear of medical procedures and reluctance to pursue health careers. This treatment offers a new perspective for addressing

specific phobias that are resistant to conventional methods, highlighting the importance of understanding the emotional and mnemonic bases of phobias in order to treat them effectively.

This method shows a significant improvement in phobic symptoms, which is corroborated by studies investigating other treatment approaches for specific phobias. For example, a systematic review on the use of virtual reality for the treatment of phobias reveals significant benefits in controlled exposure to phobic stimuli, reducing the avoidance and anxiety associated with these phobias (Freitas et al., 2021). However, while the present study focuses on reprocessing and updating traumatic memories, virtual reality therapy generally uses desensitization through repeated exposure in a safe environment, highlighting different facets of psychological intervention for specific phobias. These complementary findings suggest that multiple approaches may be necessary to address the complexity of specific phobias, depending on the individual characteristics of the patient and the nature of the phobia.

In a systematic review, Wolf et al. (2022) found significant results with hypnosis in patients with dental treatment phobia (Wolf et al., 2022) and proved that hypnosis shows a positive effect in reducing dental fear. Hypnosis used for dental anxiety often does not only have a marginal effect, as in these two studies (DiClementi et al., 2007; Aartman et al., 1999), but also shows a significant and meaningful effect for reducing anxiety during dental treatment (Glaesmer et al., 2015; Abdeshahi et al., 2013). Compared to phobic individuals, the control group showed lower bilateral activation in the insula and anterior cingulate cortex in the waking state. The results suggest that anxiety-inducing stimuli, such as dental surgery, endodontic treatment or inadequate anesthesia, under hypnosis can be effectively reduced. This study provides scientific evidence that hypnosis is an effective and successful method for inhibiting the fear reaction in the brain.

In another study, Napp et al., (2021) found considerable effects of self-hypnosis in individuals with claustrophobia. The main findings of our study were that audio-guided self-hypnosis significantly reduced claustrophobic events from 43 to 16% in high-risk patients; that the need for conscious sedation decreased from 16 to 2%; and that the need for time-consuming coping actions was reduced from 28 to 13% by audio-guided self-hypnosis. Self-hypnosis and experience with MR imaging did not result in higher CLQ scores directly after imaging, and the majority of patients (67%; 35/52) stated that they would prefer future MR imaging supported by self-hypnosis (Napp et al., 2021).

### 4. Conclusion

In short, blood-injection-injury (BII) phobia presents itself as a profoundly debilitating condition, characterized by an intense fear reaction and often accompanied by a unique physiological response, such as fainting. This specific phobia not only imposes significant challenges on the daily lives of affected individuals, avoiding necessary medical procedures and influencing professional and personal choices, but also highlights a critical area of need within the spectrum of treatment for anxiety disorders.

This article contributes to the understanding of BII phobia, emphasizing the importance of considering the unique complexities of this condition when seeking therapeutic approaches. The inclusion of memory regression and reframing as a treatment method illustrates a promising advance, allowing patients to access and recode the emotional origins of their phobias in a controlled and safe manner. Such an approach not only offers the potential for more effective treatment, but also emphasizes the need for a deeper understanding of individual experiences and the mechanisms underlying phobia.

The success of memory regression treatment, as explored in this article, underlines the ability of this technique to facilitate lasting changes in individuals' perception and emotional response to previously phobic stimuli. However, it is recognized that further research is needed to optimize these interventions and make them accessible to a wider range of patients.

So while this study sheds light on the potential efficacy of memory regression in the treatment of BII phobia, it also draws attention to the continued need for therapeutic innovation and exploration. Deepening the understanding of these interventions will not only benefit those suffering from BII, but may also offer valuable insights for the treatment of a variety of anxiety disorders, promoting well-being and improved quality of life for individuals across the phobic spectrum.

#### **Conflict of interest**

The authors declare that they have no conflicts of interest. All authors read and approved the final manuscript.

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