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RESEARCH

Efficacy of preanesthetic assessment combined with pain neuroscience education in reducing anxiety, stress, and pain in elective hysterectomy: A randomized controlled trial protocol

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ABSTRACT

INTRODUCTION Elective abdominal hysterectomy is often accompanied by high preoperative anxiety and stress, which can exacerbate postoperative pain.

OBJECTIVES To determine whether the addition of pain neuroscience education to standard preanesthetic evaluation reduces preoperative anxiety and perceived stress and decreases postoperative pain among women undergoing elective total abdominal hysterectomy.

METHODS This single-center randomized controlled trial will enroll 62 adult female patients. Participants will be randomly assigned, in a 1:1 ratio, to the intervention group—standard preanesthetic assessment and pain neuroscience education—or the control group —standard preanesthetic assessment alone. Primary outcomes (pain on the Visual Analog Scale [VAS], anxiety on the Beck Anxiety Inventory [BAI],, and total score on the Perceived Stress Scale [PSS]) will be assessed at three time points: preoperatively, 1 hour postoperatively, and 8 hours postoperatively. Secondary outcomes will include the Quality of Recovery-15 (QoR-15) score and the requirement for rescue analgesia.

EXPECTED RESULTS We anticipate that integrating pain neuroscience education with standard preanesthetic evaluation will reduce anxiety and stress, decrease postoperative pain intensity, and improve overall recovery in women undergoing elective hysterectomy.

REGISTRATION ClinicalTrials.gov Identifier: NCT05435508.

KEYWORDS Pain Management, Anxiety, Stress, Psychological, Hysterectomy, Pain Neuroscience Education, Randomized Controlled Trial

INTRODUCTION

Elective total abdominal hysterectomy is commonly associated with elevated preoperative anxiety and stress, which can intensify postoperative pain and delay recovery [1,2]. Addressing both psychological and physiological factors is essential to optimize outcomes [3]. Chronic pain remains a concern: 31.9% of patients report persistent pain at one year [4], 26% at six months [5], and meta-analyses estimate a mean incidence of 20% ± 11% after gynecological surgery [6].

Preoperative anxiety predicts both acute and chronic postoperative pain. Higher anxiety levels correlate with more intense immediate pain and greater persistent postsurgical pain risk [7–9]. Factors such as pain catastrophizing and negative illness perceptions further impair recovery, highlighting the value of interventions that reduce stress and reframe pain beliefs [10,11].

Pain neuroscience education targets the cognitive and emotional dimensions of pain within a biopsychosocial framework [12,13]. By modifying pain beliefs and strengthening

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MAIN MESSAGES

- Elective hysterectomy often causes significant preoperative anxiety and postoperative pain.
- The study tests the combination of preanesthetic assessment and pain neuroscience education.
- The intervention is expected to lower anxiety, stress, and pain after surgery.

coping, pain neuroscience education can reduce postoperative pain, anxiety, and stress, and enhance recovery [14–16].

We hypothesize that adding pain neuroscience education to standard preanesthetic evaluation will reduce preoperative anxiety and stress, and postoperative pain, compared with standard evaluation alone.

Recruitment began in July 2023 and will end in September 2025. No outcome data have been analyzed or reported. Publication of this protocol ensures methodological transparency, peer review, and alignment with open-science principles.

This single-center, double-blinded, parallel-group randomized controlled trial at the University Hospital of Puebla will randomly allocate participants (1:1) to standard preanesthetic evaluation plus pain neuroscience education or standard evaluation alone, following the Standard Protocol Items: Recommendations for Interventional Trials (SPIRIT) 2025 guidelines [17]. The current reliance on standard evaluation offers a unique opportunity to test the added value of PNE.

Objectives

To determine whether the addition of pain neuroscience education to standard preanesthetic evaluation reduces preoperative anxiety and perceived stress, and decreases postoperative pain among women undergoing elective total abdominal hysterectomy

Specific objectives

- Compare differences in preoperative and postoperative pain intensity (1 and 8 hours after surgery) between the intervention and control groups.
- Compare preoperative and postoperative perceived stress levels (1 and 8 hours after surgery) between the two groups.
- Compare preoperative and postoperative anxiety levels (1 and 8 hours after surgery) between the two groups.
- Analyze the impact of the intervention on overall recovery quality at 8 hours after surgery.
- Determine whether the intervention reduces the need for rescue analgesia in the immediate postoperative period.
- Record any adverse events or unexpected effects associated with the educational intervention.

METHODS

Trial design and context

This is a parallel-group, double-blind, randomized controlled trial conducted at the University Hospital of Puebla, Mexico. Participants will be randomly assigned in a 1:1 ratio to receive either a preanesthetic assessment with pain neuroscience education or a preanesthetic standard evaluation alone. The protocol is reported in accordance with the SPIRIT 2013 statement and incorporates guidance from SPIRIT-Outcomes for outcome specification in trial protocols [17,18].

Although participant recruitment began prior to submission of this protocol, no outcome data have been analyzed or disseminated. The present manuscript aims to provide full methodological transparency and facilitate peer review of the study design, in line with open science practices.

Setting and duration

The trial is conducted at the University Hospital of Puebla, a tertiary care institution located in Puebla, Mexico. The total study period spans 29 months, from July 1st, 2023 (start of recruitment) to December 1st, 2025 (anticipated study completion), including participant follow-up.

Eligibility criteria

Inclusion criteria

- Female patients aged between 18 and 65 years.
- Patients classified under American Society of Anesthesiologists physical status I, II, or III, indicating a range from normal healthy patients to those with mild to severe systemic diseases that are controlled.
- Consent to undergo regional anesthesia as part of the surgical procedure.
- Completion of at least primary-level education, ensuring they can engage effectively with the educational components.
- Ability to understand and communicate in Spanish.
- Provision of informed consent, demonstrating their understanding and willingness to participate.

Exclusion criteria

- Patients with known inflammatory rheumatic diseases, which could interfere with study outcomes related to pain and stress management.
- Presence of major neurological or psychiatric disorders, intellectual disabilities, or learning disorders that could

impair cognitive assessment or comprehension of the educational intervention.
- Requirement for general anesthesia rather than regional anesthesia, as it could impact postoperative pain outcomes.
- Known allergy to standard analgesic protocols used in the study.
- Patients with severe language comprehension, compromising the engagement with study materials.

Recruitment and consent procedures

Participant recruitment will take place at the University Hospital of Puebla from January 2024 through February 2025. Eligible candidates will be identified via the hospital's preoperative surgical registry and screened by a trained research staff member according to predefined inclusion and exclusion criteria.

To minimize potential bias, a healthcare professional not involved in the delivery of the intervention or the assessment of outcomes will provide a standardized verbal and written explanation of the study. Written informed consent will be obtained before initiating any study-specific procedures, in accordance with the protocol approved by the Ethics Committee of the University Hospital of Puebla (CEIHUP approval no. 2022/056).

All baseline assessments for primary and secondary outcomes will be completed prior to randomization. Follow-up evaluations will be conducted according to the predefined schedule in the participant timeline (Appendix 1).

To optimize retention and minimize loss to follow-up, the study will implement SPIRIT-aligned strategies, including:

1. Personalized reminders via telephone calls and text messages before each scheduled visit.
2. Flexible scheduling for educational sessions and assessments within clinically acceptable timeframes
3. Regular proactive contact from the research team to address questions, concerns, or logistical barriers during the trial period.

Randomization,allocation, and blinding

Randomization will be conducted using a computer-generated sequence (GraphPad Software) with a 1:1 allocation ratio, assigning participants equally to the intervention or control group. The sequence will be prepared by an independent statistician with no involvement in recruitment, intervention delivery, or outcome assessment.

Randomization will be conducted using a computer-generated sequence (GraphPad Software) with a 1:1 allocation ratio, ensuring equal assignment of participants to the intervention and control groups. An independent statistician with no involvement in recruitment, intervention delivery, or outcome assessment will prepare the sequence.

Allocation concealment will be maintained using sequentially numbered, opaque, and sealed envelopes, prepared in advance by a research assistant independent of the trial team. Envelopes will be opened in sequence only after confirming participant eligibility and completing all baseline assessments. The randomization list will be stored in a password-protected file, accessible solely to the independent statistician, until the database is locked and the statistical analysis is completed.

This will be a double-blinded trial:

1. Participants will remain unaware of their group allocation.
2. Outcome assessors will be blinded to allocation throughout all data collection to minimize detection bias.

Care providers administering the intervention cannot be blinded due to the nature of the treatment; however, they will have no role in outcome assessment or data analysis, ensuring strict separation of responsibilities and preservation of blinding integrity.

Interventions

Intervention group

Participants assigned to the intervention group will receive a structured program combining pain neuroscience education with the standard preanesthetic assessment. The pain neuroscience education component is designed to enhance understanding of the biopsychosocial mechanisms of pain, facilitate reframing of pain perceptions, and promote adoption of adaptive coping strategies. The educational content is grounded in neuroscience principles and incorporates cognitive-behavioral elements relevant to perioperative pain management [19–21].

Each session will be delivered individually and in person by a certified professional, lasting approximately 35 minutes. Core topics will include pain physiology, neural pathways involved in pain modulation, and strategies for reconceptualizing pain [22].

Instructional materials, adapted from the Manual de Educación en Neurociencia del Dolor, will be evidence-based and culturally tailored [19]. Prior to trial initiation, these materials underwent structured patient validation sessions with individuals from the target population,during which iterative refinements were made based on participant feedback regarding clarity, cultural relevance, and applicability. A detailed outline of the pain neuroscience education session content is presented in Figure 1.

The preanesthetic assessment will be conducted by a qualified anesthesiologist in accordance with institutional protocols, which include reviewing the medical history, assessing physical status, and considering psychosocial factors to optimize preoperative readiness.

Figure 1. Infographic: Pain neuroscience education session.

Source: Prepared by the authors based on the study protocol, and is only available in Spanish.

Control group

Participants in the control group will undergo the standard preanesthetic assessment, consisting of a comprehensive review of medical history, physical examination, and evaluation of relevant laboratory and diagnostic studies, followed by a brief explanation of the planned anesthetic procedure. This assessment will be conducted by a qualified anesthesiologist in accordance with established institutional protocols.

Participants in the control group will undergo the standard preanesthetic assessment, which includes a comprehensive review of their medical history, a physical examination, and an evaluation of relevant laboratory and diagnostic studies, followed by a brief explanation of the planned anesthetic procedure. A qualified anesthesiologist will conduct this assessment in accordance with established institutional protocols.

No pain neuroscience education sessions or additional preoperative psychological or educational interventions will be provided to control participants. As a post-trial benefit, if the intervention demonstrates efficacy, control group participants will receive the educational materials (manual and infographic) in both printed and digital formats, along with an optional remote educational session to review the content and address questions. These post-trial activities will occur after all study outcomes have been assessed to avoid influencing trial results.

The standard preanesthetic assessment was selected as the comparator because it reflects the current standard of care in our institution and in most tertiary hospitals in Mexico. This approach provides essential medical and procedural information without incorporating structured psychological or educational content designed to alter pain-related beliefs or coping strategies. Using this control condition allows the trial to isolate and evaluate the incremental benefit of the pain neuroscience education component, ensuring both internal validity and external applicability.

Outcomes

Primary outcomes

The isual Analog Scale VASwill be used to measure subjective pain intensity. It consists of a 100-mm horizontal line anchored by "no pain" (0) and "worst pain imaginable" (10), where the patient marks a point that is measured in millimeters to obtain the final score. The scale has demonstrated high test–retest reliability (Intraclass Correlation Coefficient of 0.97) and strong construct validity for acute postoperative pain, with changes ≥10 mm considered clinically important and ≤33 mm associated with an acceptable symptom state [23,24]. It has been used and validated across multiple international contexts, including Latin American populations, where it showed significant correlations with other instruments and adequate responsiveness to change in elective surgery patients and in pediatric postoperative settings [25–27].

The Perceived Stress Scale – 14 items (PSS-14) measures perceived stress levels over the past week, evaluating unpredictability, lack of control, and overload. Each of the 14 items is rated on a Likert scale from 0 (never) to 4 (very often), with a total score ranging from 0 to 56. The Spanish version has shown high internal consistency (α = 0.85; ω = 0.80) and convergent validity with mental health indicators. In Latin America, the model has been validated in Ecuador and Peru using large samples, confirming a stable bifactorial structure [28,29].

The Beck Anxiety Inventory (BAI) assesses the severity of anxiety symptoms in adults. It contains 21 items rated on a 0 to 3 Likert scale, yielding a total score of 0 to 63, categorized into minimal, mild, moderate, or severe anxiety. The Spanish version has demonstrated high internal consistency (α > 0.85) and good convergent validity with other anxiety scales. It has been adapted and validated in Mexico among family caregivers of children with cancer, as well as in multicenter studies in Brazil and Spain, confirming acceptable psychometric properties; however, interpretation is recommended with caution due to cultural variations [30,31].

Secondary outcomes

Secondary outcomes will be assessed at baseline and 8 hours postoperative to capture functional and clinical recovery:

- Quality of Recovery-15 (QoR-15): Measures recovery across five domains—physical comfort, emotional state, physical independence, support, and pain—via 15 items scored from 0 to 10, for a total of 0 to 150 (higher = better recovery). The Spanish version (QoR-15E) shows high internal consistency (α = 0.856), excellent test–retest reliability (r = 0.998), and responsiveness to postoperative changes. It has been culturally adapted and validated in Spanish-speaking patients undergoing elective surgery, with strong correlations to pain and global recovery measures [32].
- Rescue analgesia requirement: Dichotomous variable (yes/no) indicating whether additional analgesic medication was needed beyond the standard pain protocol in the immediate postoperative period, serving as an indirect indicator of pain control effectiveness.

Sample size

The required sample size was calculated using G*Power version 3.1.9.7 for a mixed-model repeated-measures ANOVA (within–between interaction), assuming two groups, three assessment points (baseline, one hour, and eight hours), a two-tailed significance level (α) of 0.05, statistical power (1 − β) of 0.80, and an anticipated medium effect size (Cohen's f = 0.24; approximately d = 0.48). The effect size estimate was informed by previous randomized controlled trials evaluating pain neuroscience education in surgical populations, which reported between-group differences on anxiety measures ranging from 0.45 to 0.55 standard deviation units [14, 15, 22]. Based on these parameters, a total of 62 participants (31 per group) would be

sufficient to detect a statistically significant interaction between group and time for the primary outcomes. This sample size also ensures adequate power to detect comparable medium effect sizes for secondary endpoints, including postoperative pain intensity and perceived stress.

Participants' timeline: The schedule of enrolment, interventions, and assessments is summarized in Appendix 1 according to SPIRIT 2013 recommendations.

Eligibility screening is conducted before obtaining informed consent. After consent, baseline measurements are collected for all primary outcomes (pain intensity through Visual Analogue Scale (VAS), perceived stress with Perceived Stress Scale (PSS), and anxiety via Beck Anxiety Inventory (BAI)).

Randomization occurs immediately after baseline data collection is completed. The allocated intervention (Pain Neuroscience Education plus standard preanesthetic assessment, or standard preanesthetic assessment alone) is delivered before surgery.

Follow-up assessments are conducted at:

- One hour postoperative: VAS, PSS, BAI, and rescue analgesia use.
- Eight hours postoperative: VAS, PSS, BAI, Quality of Recovery-15, and rescue analgesia use.

This timeline ensures standardized and consistent data collection across all participants, enabling valid comparisons between groups (online supplementary file).

Data collection and management

Data will be collected at three predefined time points:

Preoperative: Collection of all primary outcomes (VAS, PSS, BAI) and baseline demographic/clinical variables.

- 1 hour postoperative: VAS, PSS, BAI, and rescue analgesia use.
- 8 hours postoperative: VAS, PSS, BAI, Quality of Recovery-15, and rescue analgesia use.

All data collection will follow standardized protocols and be conducted by trained research staff who are blinded to group allocation. Standardized and validated Spanish versions of all instruments will be used, along with uniform instructions to ensure consistency in administration.

Data entry and storage:

All data will be entered into a secure, password-protected electronic database. A double data entry process will be implemented, and any discrepancies will be resolved by reviewing the original source documents. Each participant will be assigned a unique study identification code; the code key will be stored separately in an encrypted file accessible only to the principal investigator.

Confidentiality

All identifying information will be removed from study documents, and data will be handled in accordance with institutional and regulatory privacy standards.

Data monitoring

Independent audits will be conducted every six months to verify adherence to protocol, data accuracy, and participant safety. Any discrepancies, protocol deviations, or missing data will be addressed promptly through verification and corrective actions.

Statistical analysis plan

All statistical analyses will be conducted using IBM SPSS Statistics version 26 (IBM Corp., Armonk, NY, USA).

Baseline characteristics

Baseline demographic and clinical variables will be summarized using descriptive statistics, including means and standard deviations (SD) for continuous variables and frequencies and percentages for categorical variables. Between-group comparisons at baseline will be explored using independent t-tests for continuous variables and chi-square tests for categorical variables, without formal hypothesis testing, to assess comparability after randomization and identify any potential imbalances that may require covariate adjustment in subsequent analyses.

Primary outcomes

Each primary outcome—pain intensity (VAS), perceived stress (PSS), and anxiety (BAI)—will be analyzed in separate two-way mixed-model repeated-measures ANOVAs, with time (baseline, one hour, eight hours) as the within-subject factor and group (intervention vs control) as the between-subject factor. Interaction effects (time × group) will be examined to determine whether there are differential changes over time between groups. To control the family-wise error rate across the three primary outcomes, a Bonferroni adjustment will be applied to the resulting p-values. Partial eta squared (η^2p) will be reported as the measure of effect size.

Secondary outcomes

- Quality of Recovery-15 (QoR-15): Between-group comparisons at eight hours post-surgery will be conducted using independent t-tests. Within-group changes from baseline to 8 hours will be assessed using paired t-tests, with the Bonferroni correction applied where applicable to account for multiple testing.
- Rescue analgesia use: Between-group comparisons will be analyzed using chi-square tests, or Fisher's exact test when expected cell frequencies are below 5, with results expressed as risk differences and 95% confidence intervals.

Handling of missing data

Missing outcome data will be addressed using multiple imputations, assuming the missing data are missing at random. Twenty imputed datasets will be generated, and parameter estimates will be pooled according to Rubin's rules. Sensitivity analyses using complete-case data will be conducted to assess the robustness of the findings, and any discrepancies between the imputed and complete-case results will be reported.

Adjustment for multiple comparisons

For pairwise post hoc comparisons following significant ANOVA results, a Bonferroni correction will be applied to control the family-wise error rate. Unless otherwise specified (e.g., adjusted for primary outcome multiplicity), the overall significance threshold will be set at $p < 0.05$ (two-tailed).

Analysis population

All primary analyses will follow the intention-to-treat principle, including all randomized participants in the groups to which they were assigned, regardless of protocol adherence or loss to follow-up. Per-protocol analyses, restricted to participants who fully complied with the intervention protocol and completed all primary outcome assessments, will be conducted as a secondary exploratory approach to assess the consistency of findings.

Monitoring

Trial oversight will be ensured by an independent data monitoring committee comprising three members: an anesthesiologist, a physiotherapist specializing in pain management, and a biostatistician. All members are independent from the trial team and have no involvement in participant recruitment, intervention delivery, or data analysis, thereby safeguarding impartiality in oversight activities.

The data monitoring committee will convene quarterly to:

1. Monitor recruitment progress and compliance with the approved protocol.
2. Review participant safety, including the documentation and evaluation of adverse events and serious adverse events.
3. Assess data quality, completeness, and timeliness of data entry.
4. Provide formal recommendations on trial continuation, protocol modifications, or early termination based on safety or efficacy considerations.

Safety reporting

All adverse events and serious adverse events will be documented in case report forms and assessed for severity, expectedness, and potential relatedness to the intervention. Serious adverse events will be reported to the Ethics Committee of the University Hospital of Puebla within 72 hours of identification. The principal investigator will be responsible for ensuring compliance with local and international safety reporting requirements.

Interim analyses

A single interim analysis will be performed when 50% of participants have completed the study protocol, primarily to evaluate safety and secondarily to examine preliminary efficacy. The O'Brien–Fleming stopping boundary will be applied to determine whether early termination is justified due to clear evidence of harm or overwhelming benefit. All interim analyses will be conducted by an independent statistician, with results communicated exclusively to the data monitoring committee.

Audit procedures

Independent audits will be conducted every six months by personnel not involved in the trial. These audits will review informed consent documentation, protocol compliance, and data accuracy by cross-checking case report forms against source documents. Any protocol deviations or discrepancies will be documented, and corrective actions will be implemented promptly by the principal investigator in consultation with the Ethics Committee.

ETHICS

This trial will be conducted in accordance with the Declaration of Helsinki, the International Council for Harmonisation – Good Clinical Practice (ICH-GCP) guidelines, and all applicable national regulations.

Approval was obtained from the Ethics Committee of the University Hospital of Puebla, Benemérita Universidad Autónoma de Puebla (Approval No. CEIHUP 2022/056). Any protocol amendments that may affect participant safety, study objectives, design, or procedures will be submitted for prior review and approval by the Ethics Committee before implementation.

Written informed consent will be obtained from all participants before any study-related procedure. The consent process will include a clear explanation of the study's objectives, methods, potential risks and benefits, measures to protect confidentiality, and the voluntary nature of participation, including the right to withdraw at any time without affecting medical care.

All participant data will be pseudonymized and stored in an encrypted, password-protected electronic database accessible only to authorized members of the research team. The key linking participant identities to study codes will be kept in a separate, secure file. Data will be retained for a minimum of five years following the completion of the study, in compliance with institutional and legal requirements.

If the intervention demonstrates a significant clinical benefit, participants in the control group will be offered the pain neuroscience education program upon completion of the study.

TRIAL REGISTRATION

This trial is registered at ClinicalTrials.gov (Identifier: NCT05435508).

DISSEMINATION POLICY

The findings of this trial will be disseminated through multiple channels to ensure broad accessibility and impact:

- Peer-reviewed publications: Primary and secondary results will be submitted to high-impact journals in anesthesiology, pain medicine, and perioperative care.
- Scientific conferences: Results will be presented at national and international congresses, including those focused on anesthesiology and pain management.
- Educational dissemination: Key findings and clinical implications will be shared with healthcare providers through institutional workshops, seminars, and training sessions.
- Patient and public communication: Lay summaries of results will be provided to participants and relevant patient organizations to promote transparency.

All reporting will adhere to the CONSORT 2010 guidelines for randomized controlled trials. Authorship will follow the ICMJE criteria. No professional medical writers will be employed, nd funding sources will impose no restrictions on publication.

EXPECTED IMPACT AND RELEVANCE

This trial addresses a critical gap in perioperative care by integrating pain neuroscience education with preanesthetic assessment for patients undergoing elective total abdominal hysterectomy. By targeting both psychological and physiological factors, this combined approach has the potential to reduce preoperative anxiety, perceived stress, and postoperative pain—factors known to influence recovery trajectories and long-term outcomes.

If effective, the intervention could be incorporated into standard preoperative protocols, offering a cost-effective, non-pharmacological strategy to enhance patient recovery and satisfaction. The study's focus on double blinding, rigorous methodology, and validated outcome measures ensures high internal validity, thereby strengthening the potential for replication in other surgical contexts.

The anticipated benefits extend beyond clinical outcomes, potentially reducing hospital stay length, lowering analgesic consumption, and improving overall quality of recovery. These improvements may also translate into reduced healthcare costs and broader adoption of biopsychosocial models in surgical practice.

By disseminating findings to both scientific and patient communities, this trial aims to contribute to the global evidence base on perioperative pain management, promote patient-centered care, and stimulate further research on educational interventions in surgery.

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Competing interests The authors declare no competing interests.

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Supplementary files Appendix 1 & 2. Diagram for recruiting and conducting interventions and evaluations according to SPIRIT Guidelines. MORALES, MARCO (2025). https://doi.org/10.6084/m9.figshare.29998144

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Eficacia de la evaluación preanestésica combinada con educación en neurociencia del dolor en la reducción de ansiedad, estrés y dolor en histerectomía electiva: protocolo de ensayo clínico aleatorizado

RESUMEN

INTRODUCCIÓN La histerectomía abdominal electiva suele acompañarse de elevada ansiedad y estrés preoperatorios, que pueden exacerbar el dolor postoperatorio.
OBJETIVOS Determinar si la adición de educación sobre neurociencias del dolor a la evaluación preanestésica estándar reduce la ansiedad preoperatoria, el estrés percibido, y el dolor postoperatorio entre las mujeres sometidas a histerectomía abdominal total electiva.
MÉTODOS Este ensayo controlado aleatorizado unicéntrico incluirá a 62 pacientes adultas. Las participantes serán asignadas aleatoriamente, en una proporción de 1:1, al grupo de intervención -evaluación preanestésica estándar y educación en neurociencias del dolor- o al grupo de control -evaluación preanestésica estándar sola-. Los resultados primarios (dolor en la Escala Visual Analógica [EVA], ansiedad en el Inventario de Ansiedad de Beck [BAI] y puntaje total en la Escala de Estrés Percibido [PSS]) se evaluarán en tres momentos: preoperatorio, 1 hora postoperatoria y 8 horas postoperatorias. Los resultados secundarios incluirán la puntuación de Calidad de la Recuperación-15 (QoR-15) y la necesidad de analgesia de rescate.
RESULTADOS ESPERADOS Prevemos que la integración de la educación en neurociencia del dolor con la evaluación preanestésica estándar reducirá la ansiedad y el estrés, disminuirá la intensidad del dolor postoperatorio y mejorará la recuperación general de las mujeres sometidas a histerectomía electiva.
REGISTRO ClinicalTrials.gov Identificador: NCT05435508.