Comparison of the Effects of Alprazolam and Zaleplon on Anxiety Levels in Patients Undergoing Abdominal Gynecological Surgery

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Abstract: Context: Preoperative anxiety is a common psychological reaction experienced by all patients undergoing surgery. It can have negative effects on the patient's well-being and even impact surgical outcomes. Therefore, finding effective interventions to reduce preoperative anxiety is important in improving patient care. Research Aim: The aim of this study is to compare the effects of oral administration of zaleplon (5 mg) and alprazolam (0.5 mg) on preoperative anxiety levels in women undergoing gynecological abdominal surgery. Methodology: This study is a double-blind, randomized clinical trial conducted after receiving approval from the university's ethics committee and obtaining written informed consent from the patients. The night before the surgery, patients were randomly assigned to receive either 0.5 mg of alprazolam or 5 mg of zaleplon orally. Anxiety levels, measured using a 10-cm visual analog scale, and hemodynamic variables (blood pressure and heart rate) were assessed before drug administration and on the morning of the operation after the patient entered the pre-operation room. Findings: The study found that there were no significant differences in mean anxiety levels or hemodynamic variables before and after administration of either drug in both groups (P value > 0.05). This suggests that both 0.5 mg of alprazolam and 5 mg of zaleplon effectively reduce preoperative anxiety in women undergoing abdominal surgery without serious side effects. Theoretical Importance: This study contributes to the understanding of the effectiveness of alprazolam and zaleplon in reducing preoperative anxiety. It adds to the existing literature on pharmacological interventions for anxiety management, specifically in the context of gynecological abdominal surgery. Data Collection: Data for this study were collected through the assessment of anxiety levels using a visual analog scale and measuring hemodynamic variables, including systolic, diastolic, and mean arterial blood pressures, as well as heart rate. These measurements were taken before drug administration and on the morning of the surgery. Analysis Procedures: Statistical analysis was performed to compare the mean anxiety levels and hemodynamic variables before and after drug administration in the two groups. The significance of the differences was determined using appropriate statistical tests. Questions Addressed: This study aimed to answer the question of whether there are differences in the effects of alprazolam and zaleplon on preoperative anxiety levels in women undergoing gynecological abdominal surgery. Conclusion: The oral administration of both 0.5 mg of alprazolam and 5 mg of zaleplon the night before surgery effectively reduces preoperative anxiety in women undergoing abdominal surgery. These findings have important implications for the management of preoperative anxiety and can contribute to improving the overall surgical experience for

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