

Music Therapy for Pain and Anxiety Management in Nasal Bone Fracture Reduction: Randomized Controlled Clinical Trial

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Objective: To evaluate whether listening to music through binaural headphones contributes to the perception of pain and anxiety in patients undergoing closed nasal bone fracture reductions. **Study Design:** Randomized controlled trial. **Subjects and Methods:** We recruited patients from San Juan de Dios Hospital with displaced nasal fractures who required a reduction and assigned them to a control group or a music group. For both groups, a protocolized closed reduction of the nasal fracture with local anesthesia was performed. The music group heard music through headphones during the pre-, intra-, and postprocedural periods of the intervention. Physiological variables (blood pressure and heart rate) were measured. An anxiety survey (State-Trait Anxiety Inventory) and the visual analog scale for measuring pain were also applied. **Results:** The music group exhibited significantly lower levels of systolic blood pressure ($P = .0001$), anxiety ($P < .0001$), and pain ($P = .0004$) than the control group. **Conclusion:** Listening to music through headphones? a safe and low-cost intervention? appears to aid in pain and anxiety management associated with procedures that are usually uncomfortable, such as the reduction of nasal bone fractures with local anesthesia. We believe that this effect is achieved by the modulation of pain and anxiety on an emotional-affective dimension at a central level. Given its safety, feasibility, and low cost, music therapy should be considered a complementary treatment for pain and anxiety management for nasal fracture reduction performed with local anesthesia, as well as for other medical procedures of similar pain levels conducted without general anesthesia.