

The Effect of Live Classical Piano Music on the Vital Signs of Patients Undergoing Ophthalmic Surgery

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Abstract

Objective: To determine the effect of live classical piano music on the vital signs of patients undergoing ophthalmic surgery.

Design: Retrospective case series

Setting and Patients: 203 patients who underwent various ophthalmologic procedures during the period a piano was present in the operating room of St. Francis Medical Center
Intervention: Demographic data, surgical procedures, and the vital signs of 203 patients who underwent ophthalmologic procedures, were obtained from patient records. Blood pressure, heart rate and respiratory rate taken in the pre-operative holding area was compared to the same parameters taken in the operating room, with and without exposure to live piano music. A paired t-test was used for statistical analysis.

Main outcome measure: mean arterial pressure, heart rate and respiratory rate

Results: 115 patients who were exposed to live piano music showed a statistically significant decrease of their mean arterial blood pressure, heart rate, and respiratory rate in the operating room compared to the vital signs measured in the pre-operative holding area ($P < 0.0001$). The control group of 88 patients not exposed to live piano music showed a statistically significant increase of their mean arterial blood pressure ($P < 0.0002$), heart rate and respiratory rate ($P < 0.0001$).

Conclusion: Live classical piano music had a lowering effect on the blood pressure, heart rate, and respiratory rate on patients undergoing ophthalmic surgery. The authors can be reached at jruszkow@hawaii.rr.com

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