Impact of music on anxiety among patients undergoing eye surgery under topical anaesthesia

**Background and Goal of the Study:** Awake ophthalmologic surgery is particularly stressful for patients. Music has long been known to reduce anxiety, minimize the need for sedatives, and make patients feel more at ease. The purpose of this pilot study was to evaluate the effect of music on anxiety in outpatients undergoing elective eye surgery under topical anaesthesia.

**Materials and Methods:** Sixty-two patients were prospectively and randomly assigned to hear relaxing music or no music via headphones just before surgery. Surgical Fear Questionnaire (SFQ) and Patient Satisfaction Questionnaire (PSQ) were used to assess anxiety before and after music session and overall patient satisfaction postoperatively. The proportion of patients receiving midazolam during surgery was also recorded. Comparisons were made using Chi-Square, or ANOVA, where appropriate.

**Results and Discussion:** According to SFQ scores, anxiety was significantly reduced among the music group after listening to music (23 [0-45] vs 65 [10-88] p<0.001). Similarly, satisfaction scores were higher in the music group (71 [43-80] vs 55 [10-60] p=0.02). The music group received significantly less sedatives during surgery compared with the non-music group (16% vs 32%; p=0.03).

**Conclusions:** Music listening may be considered as an inexpensive, non-invasive, non-pharmacologic mean to reduce anxiety for patients undergoing elective eye surgery under topical anaesthesia.

<table>
<thead>
<tr>
<th>SFQ (mean 95%CI)</th>
<th>Music group n=31</th>
<th>No music group n=31</th>
<th>p-value</th>
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<tbody>
<tr>
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<td>23 [0-45]</td>
<td>65 [10-88]</td>
<td>&lt;0.001</td>
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**S1 Surgical Fear Questionnaire**

1. I am afraid of the operation
2. I am afraid of the anaesthesia
3. I am afraid of the pain after the operation
4. I am afraid of the unpleasant side effects (like nausea) after the operation
5. I am afraid my health will deteriorate because of the operation
6. I am afraid the operation will fail
7. I am afraid that I won’t recover completely from the operation
8. I am afraid of the long duration of the rehabilitation after the operation

0 not at all afraid
1 to 10 very afraid