MUSIC IN THE OPERATING ROOM

Subjective benefit to patients, ease of setting up & innocuity during quiet routine oculoplastic procedures

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Listening to music during surgery has a **subjective benefit** to patients under local anesthesia. Its setting up during quiet routine oculoplastic surgery is **easy and inexpensive**. When subject to some elementary precautions, there is **no increased risk**.

Introduction

Surgery generates stress. Patient stress is undesirable. It is responsible for discomfort, increased sensitivity to pain and increased operative risk. Anything that is likely to reduce perioperative patient stress should be considered.

In the operating room, music acts as a mild anxiolytic, reducing the anxiety of the patient and participating in the normalization of its hemodynamic values. The virtues of music have been demonstrated both in preoperative, per operative and postoperative. (1,2,3)

But there is some debate about whether music in the operating room improves the surgical work or adds to the environmental noise, creating a potentially dangerous distraction. (4,5,6)

There is certainly debate in the case of difficult and/or noisy surgeries, in particular under general anesthesia, but is there really a debate for quiet routine oculoplastic procedures?

Playing music through an external speaker during 20 bilateral upper blepharoplasties

Surgeries were realized by the same surgeon in an identical quiet localanesthesia setting. Patients were divided in two groups.

Group 1

First upper eyelid without music

Second upper eyelid with quiet music through an external speaker Group 2

First upper eyelid with quiet music through an external speaker Second upper eyelid without music

Changes in ambient noise level in the operating room was measured using a dB meter.

Patients, surgical aides and nurses were asked to answer an anonymous questionnaire directly after the surgery.

Among the questions to patients:

- Did you appreciate the use of music during your surgical procedure ?
- Did you notice that the music was only used for one eyelid?
- Did you feel a difference in comfort when music was used?Do you think that the use of music helped you manage anxiety?
- Would you want music for another similar surgery ?
- If so, would you prefer being able to choose the music?

Among the questions to the team:

- Did you appreciate the use of music during the procedure ?
- Did you feel a difference in working comfort when music was used?
- Do you consider the use of music distracting and/or risky?Would you prefer being able to choose the music?
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Result:

Both patients and the team reported comfort was always better with the use of music.

Patients of group 1 reported feeling relief when the music was turned on. Patients in group 2 described the music being turned off in negative terms. The average sound level increased by 5 dB, but stayed under 60 dB. The surgical aides and circulating nurses were always happy with the use of music, which improved their subjective working comfort. They didn't think that the music could be responsible for an increase in surgical risk.

Playing music through patient earbuds (i.e. in-ear headphones) during 10 bilateral upper blepharoplasties

During the preoperative consult, patients were invited to use their personal mp3 player during the upcoming surgery. They were invited to prepare a quiet playlist and to test it before the surgery, in order to reduce the need of manipulation during the surgery.

Patients, surgical aides and nurses were asked to answer an anonymous questionnaire directly after the surgery.

Among the questions for patients:

- Did you find the setting up and use of the mp3 player and earbuds easy?
- Did you appreciate the use of music during your surgical procedure?
- Do you think that the music helped you manage anxiety?

Among the questions to the team:

- Did you find the setting up and use of the mp3 player and earbuds easy?
- Did you consider communicating with the patient was a problem ?
- Do you consider the use of music distracting and/or risky?

Result:

Many patients are accustomed to mp3 players and earbuds. They appreciate being invited to use them in the operating room. Their setting up was easy and permitted an efficient and independent patient isolation.

The use of earbuds is not associated with any detectable noise increase in the operating room.

It doesn't seem to increase distraction or surgical risks. Communicating with patients was never a problem.

Earbuds secured and protected by a plastic film before draping



Discussion

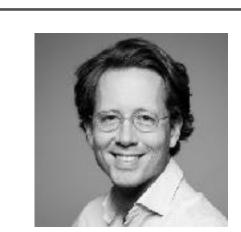
Many oculoplastic procedures are performed in very quiet atmospheres, with few noise-making monitors or instruments. Calm music could then be played through a local speaker, reducing patient anxiety and improving working comfort without adding to perceived noise or risk. To create an inclusive and safe working environment, music should suit everybody in the operating room and be easily and quickly interrupted if needed.

To further lessen the potential of distracting either the surgeon or their team and to avoid any other increased risks from a noisier work environment, the use of earbuds was trialled. Earbuds have the advantage of better isolating the patient from the stressful noises and anxiogenic conversations in the surgical environment. Patient earbuds may also allow them and the operating team to separately and safely listen to their own choice of music.

References

- 1. Mattei TA, Rodriguez AH. Music therapy as an adjuvant therapeutic tool in medical practice: an evidence-based summary. OA Evidence-Based Medicine. (2013), 1(1), 2.
- 2. Bradt J, Dileo C, Shim M. Music interventions for preoperative anxiety. Cochrane Database of Systematic Reviews. (2013), 6. Art. No.: CD006908. DOI: 10.1002/14651858.CD006908.pub2.
- 3. Kyriakoula Merakou & Al. Blood Pressure and Heart Rate Alterations through Music in Patients Undergoing Cataract Surgery in Greece. Ophthalmol Eye Dis. (2015), 7, 7–12.

 4. Faraj AA, Wright AP, Haneef JH, Jones A.Listen while you work? The attitude of healthcare professionals to music in the operating theatre. J Perioper Pract. (2014),
- 24(9), 199-204.
 5. Lies SR, Zhang AY. Prospective Randomized Study of the Effect of Music on the Efficiency of Surgical Closures. Aesthetic Surgery Journal. (2015), 35(7), 858–863.
- 6. Shambo L, Umadhay T, Pedoto A. Music in the operating room: is it a safety hazard? AANA J. (2015), 83(1), 43-8.





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