

Improved recovery after music and therapeutic suggestions during general anaesthesia: a double-blind randomised controlled trial.

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ABSTRACT

Purpose: This study was designed to determine whether music or music in combination with therapeutic suggestions in the intra-operative period under general anaesthesia could improve the recovery of hysterectomy patients.

Methods: In a double-blind randomised clinical investigation, 90 patients who underwent hysterectomy under general anaesthesia were intra-operatively exposed to music, music in combination with therapeutic suggestion or operation room sounds. The anaesthesia was standardised. Postoperative analgesia was provided by a patient-controlled analgesia (PCA). The pain scores were recorded by means of a visual analogue scale. Nausea, emesis, bowel function, fatigue, well-being and duration of hospital stay were studied as outcome variables.

Results: On the day of surgery, patients exposed to music in combination with therapeutic suggestions required less rescue analgesic compared with the controls. Patients in the music group experienced more effective analgesia the first day after surgery and could be mobilised earlier after the operation. At discharge from the hospital patients in the music and music combined with therapeutic suggestion group were less fatigued compared to the controls. No differences were noted in nausea, emesis, bowel function, well-being or length of hospital stay between the groups.

Conclusion: This double-blind study has demonstrated that intra-operative music and music in combination with therapeutic suggestions may have some beneficial effects on postoperative recovery after hysterectomy. Further controlled studies are necessary to confirm our results.

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Analgesia following music and therapeutic suggestions in the PACU in ambulatory surgery; a randomized controlled trial.

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ABSTRACT

Background: This study was designed to determine whether music (M), or music in combination with therapeutic suggestions (M/TS) could improve the postoperative recovery in the immediate postoperative in daycare surgery.

Methods: One-hundred and eighty-two unpremedicated patients who underwent varicose vein or open inguinal hernia repair surgery under general anaesthesia were randomly assigned to (a) listening to music (b) music in combination with therapeutic suggestions or (c) blank tape in the immediate postoperative period. The surgical technique, anaesthesia and postoperative analgesia were standardized. Analgesia, the total requirement of morphine, nausea, fatigue, well-being, anxiety, headache, urinary problems, heart rate and oxygen saturation were studied as outcome variables.

Results: Pain intensity (VAS) was significantly lower ($P = 0.002$) in the M (2.1), and the M/TS (1.9) group compared with the control group (2.9) and a higher oxygen saturation in M (99.2%) and M/TS (99.2%) group compared with the control (98.0%), $P < 0.001$, were found. No differences were noted in the other outcome variables.

Conclusion: This controlled study has demonstrated that music with or without therapeutic suggestions in the early postoperative period has a beneficial effect on patients' experience of analgesia. Although statistically significant, the improvement in analgesia is modest in this group of patients with low overall pain levels.

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A comparison of intra-operative or postoperative exposure to music— a controlled trial of the effects on postoperative pain.

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ABSTRACT

The effect of intra-operative compared to postoperative music on postoperative pain was evaluated in a controlled trial. In all, 151 patients undergoing day case surgery for inguinal hernia repair or varicose vein surgery under general anaesthesia were randomly allocated to three groups: group 1 listened to music intra-operatively, group 2 listened to music postoperatively and group 3, the control group, listened to 'white noise'. The anaesthetic and postoperative analgesic techniques were standardised. Pain was assessed using a numeric rating scale (0-10) and patients requirements for postoperative morphine, paracetamol and ibuprofen was recorded. The effect of music on nausea, fatigue and anxiety was also investigated. The results showed that patients exposed to music intra-operatively or postoperatively reported significantly lower pain intensity at 1 and 2 h postoperatively and patients in the postoperative music group required less morphine at 1 h compared to the control group. No differences were noted in the other variables. This study demonstrates that there is a short-term pain-reducing effect of music therapy however, the beneficial effects do not differ if the patient is exposed to music intra-operatively or postoperatively.

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Stress reduction and analgesia in patients exposed to calming music postoperatively: a randomized controlled trial.

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ABSTRACT

BACKGROUND AND OBJECTIVES: This randomized controlled trial was designed to evaluate, first, whether intra- or postoperative music therapy could influence stress and immune response during and after general anaesthesia and second, if there was a different response between patients exposed to music intra- or postoperatively.

METHOD: Seventy-five patients undergoing open hernia repair as day care surgery were randomly allocated to three groups: intraoperative music, postoperative music and silence (control group). Anaesthesia and postoperative analgesia were standardized and the same surgeon performed all the operations. Stress response was assessed during and after surgery by determining the plasma cortisol and blood glucose levels. Immune function was evaluated by studying immunoglobulin A (IgA) levels. Patients' postoperative pain, anxiety, blood pressure (BP), heart rate (HR) and oxygen saturation were also studied as stress markers.

RESULTS: There was a significantly greater decrease in the level of cortisol in the postoperative music group vs. the control group (206 and 72 mmol L(-1) decreases, respectively) after 2 h in the post anaesthesia care unit. The postoperative music group had less anxiety and pain and required less morphine after 1 h compared with the control group. In the postoperative music group the total requirement of morphine was significantly lower than in the control group. The intraoperative music group reported less pain after 1 h in the post anaesthesia care unit. There was no difference in IgA, blood glucose, BP, HR and oxygen saturation between the groups.

CONCLUSION: This study suggests that intraoperative music may decrease postoperative pain, and that postoperative music therapy may reduce anxiety, pain and morphine consumption.

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The anxiety- and pain-reducing effects of music interventions: a systematic review.

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ABSTRACT

Musical interventions have been used in health care settings to reduce patient pain, anxiety, and stress, although the exact mechanism of these therapies is not well understood. This article provides a systematic review of 42 randomized controlled trials of the effects of music interventions in perioperative settings. Music intervention had positive effects on reducing patients' anxiety and pain in approximately half of the reviewed studies. Further research into music therapy is warranted in light of the low cost of implementation and the potential ability of music to reduce perioperative patient distress.

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