

Frequently overlooked and rarely listened to: Music therapy in gastrointestinal endoscopic procedures

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Abstract

To elucidate the role of music therapy in gastrointestinal endoscopic procedures following the conflicting outcomes reported in two recent studies. The findings of our recent meta-analysis that examined this matter were discussed in the context of later studies. Our meta-analysis illustrated the beneficial effects of music therapy on patient anxiety levels when used as a single measure of relaxation and analgesia. Beneficial effects were also shown on analgesia and sedation requirements and procedure duration times when used as an adjunct to pharmacotherapy. These findings are in agreement with those of both studies excluded from analysis and those that followed it. Music therapy is an effective tool for stress relief and analgesia in patients undergoing gastrointestinal endoscopic procedures.

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Key words: Music; Endoscopy; Colonoscopy; Meta-analysis

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TO THE EDITOR

I greatly enjoyed reading the well-conducted, well-written studies by Ovayolu *et al*^[1] and Bechtold *et al*^[2] exploring the affects of music therapy on patients undergoing gastrointestinal endoscopic procedures. Those studies reported conflicting outcomes, which we aimed to resolve in our meta-analysis^[3].

Our meta-analysis involved 641 patients undergoing

esophagogastroduodenoscopy, flexible sigmoidoscopy or colonoscopy, with or without intervention through music therapy. The intervention was conducted by patient exposure to patient or researcher selected music, delivered with/without headphones, before and/or during the procedure. For patients that did not receive pharmacotherapy, anxiety levels were used as efficacy measures. For patients that did receive pharmacotherapy, medications were not uniformly administered within studies, and thus anxiety levels could not be used for that purpose. Alternately, medication requirements and procedure durations were noted. Our meta-analysis yielded significantly lower anxiety levels for the former group, whereas the latter group exhibited significant reductions in analgesia requirements and procedure duration times, while reductions in sedation requirements approached significance. Our findings are in agreement with those of both studies excluded from analysis^[3] and those that followed it^[2,4]. Furthermore, these findings are of particular importance, as sedation, analgesia use and procedures of prolonged duration are linked to cardiopulmonary complications. Further, patients undergoing intervention reported greater satisfaction rates and were more willing to have the procedures repeated^[3]. Additionally, while our meta-analysis was insufficiently sized to determine a preferable intervention protocol, we suggested that patient selected music, delivered through headphones, may provide maximal benefits while circumventing potentially undesirable exposure of the medical staff to that particular music. Accordingly, despite only minor benefits reported by some^[2], we suggest that this safe and cost-effective measure not be overlooked^[3].

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