PO Box 2345, Beijing 100023, China
www.wjgnet.com
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LETTERS TO THE EDITOR

Colonoscopy and the role of music therapy: How to go about an ideal protocol?

R Harikumar, Simi Kumar

R Harikumar, Simi Kumar, V.S. M Hospital, Mavelikkara, Alapuzha, Kerala, S.India, Pin-690103, India
Correspondence to: Dr. R Harikumar, Consultant gastroenterologist, V.S.M Hospital, Mavelikkara, Alapuzha,Kerala, S.India, Pin-690103, India. harikumnair@yahoo.co.in
Telephone: +91-47-92304901-4 Fax: +91-47-92304421
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TO THE EDITOR

We read with great interest the two articles in the December 2006 issue of your esteemed journal on the utility of music therapy in the performance of colonoscopy[1,2]. The role of non-pharmacological or cognitive behavioral interventions in improving performance of GI Endoscopic procedures is actively undergoing research world over. Ovayolu N *et al* from Turkey found a positive effect and concluded that music can decrease the dose of sedative medication[2]. This is akin to the work done by other groups including our own study form India[3,4].

Bechtold M *et al* from the USA. reported only marginal benefit of music and the study did not bring forth any clue towards decreasing the dose of drugs[1]. We would like to point out the following aspects, which probably would have affected the Bechtold study. (1) Choice of music: - While the Turkish study utilized Turkish classical music, the American study has mentioned their music intervention as 'relaxing'. The social and demographic structuring of Turkey is more or less uniform, while in the USA; there is a florid admixture of races from all over the globe. Since music is a highly subjective perception, what is relaxing for an American of Indian origin may not be soothing for a Chinese or European settled in the U.S. In many music therapy projects, Nature Music (soft instrumental music admixed with nature sounds) is used as an intervention[4], since it crosses all language, social and cultural barriers. The American protocol should have utilized a music intervention like Nature Music, which is more applicable to all. Also, certain type of music can result in a discordant effect in some people (e.g., an Indian who is keen on Hindustani classical music may feel Rock music extremely irritating). In situations where demographic variability is high, like in the USA, self-selected music would be ideal[5]. (2) The dose of the drugs given before starting the procedure ('zero dose' or baseline dose) differs widely in the two studies. The Turkish study gave a low baseline dose of 10 mg and 1 mg of Meperidine and Midazolam respectively, while the Bechtold study gave a high dose of 50 mg of Meperidine and 2 mg of Midazolam. The high dose of analgo-sedative medication given as 'zero dose' failed to bring out the subtle beneficial effects of music intervention, since patient would have already been 'knocked out' as far as pain perception is concerned even before onset of the procedure[6]. The 'zero dose' and mean dose of drugs are not grossly different in the Bechtold study, confirming the fact that high 'zero dose' was given. There have been studies where participants were willing to undergo colonoscopy without sedation[7]. Music intervention can be considered as something in between no sedation and high dose sedation. So, if a high dose medication is given at the outset, effect of music, if any, would naturally get masked. Thus, to bring out the effect of music intervention either a low 'zero dose' or patient controlled sedation (PCS) has to be given[3]. (3) The method of sample size assessment in the Bechtold study appears to be supported neither by existing literature nor by logic. They expected a 3 min difference in procedure time between music group and non-music group. During colonoscopy, the patient is mostly passive and the colonoscope is actively maneuvered in by the colonoscopist. Procedure time is dependent on various factors including technical expertise of the colonoscopist, whether biopsy or polypectomy is being performed, prior abdominal surgery causing adhesions, age, anatomical peculiarities of the sigmoid colon etc. Since the patient has mostly a passive role as far as procedure time is concerned, music intervention given to the patient is unlikely to affect procedure time in a big way. Due to the same reason, there is a dearth of positive literature on the same. Music which the patient is allowed to listen to has a stronger bearing on pain, discomfort, satisfaction, anxiety, dose of drugs administered etc. than on procedure time.

Other methodological problems, which were common to both the Turkish and the American studies, were lack of details on type of procedures performed. How many underwent polypectomies? How many biopsies? What was the adequacy of preparation? What percentage received abdominal pressure to facilitate scope insertion? In what percentage of cases ileum was entered?

In conclusion, we believe that the future protocols

on music therapy research could probably inculcate the above-mentioned factors too to achieve finer and more dependable results.

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