compared with tranquilizing music. Correspondingly, HR (and RR) increases during musical frissons, especially when associated with piloerection. It also appears that, compared with silence, music increases HR and RR, and that HR and RR are higher during pleasant than unpleasant music. New findings suggest that music also has effects on the regional activity of the heart, as reflected in changes of ECG amplitude patterns. In clinical settings, music can reduce pain and anxiety, associated with reductions in BP and RR. Thus, music is potentially a low-cost and safe adjuvant for intervention and therapy. However, the effects of music on the heart are small, and results of studies on this topic are often inconsistent. Therefore, there is pressing need for systematic high-quality research on the effects of music on the heart in both healthy individuals and patients.

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References
The list of references is available in the online version of this paper.

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Histological diagnosis of septic embolic myocardial infarction

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A 39-year-old man, who had no traditional coronary risk factor other than smoking, presented to the emergency department with a 3-day history of 39ºC fever and chest oppression lasting for the past 2 h. ST-segment elevation in the precordial leads on electrocardiogram, elevated serum levels of cardiac enzymes and hypokinetic motion detected by echocardiography in the antero-apical wall of left ventricle, indicated that he had acute anterior myocardial infarction (AMI). Emergency coronary angiography demonstrated a long radiolucent lesion (white arrows) in the middle portion of left anterior descending (LAD) artery (Panel A, see Supplementary material online, Video S1) and the occlusion of the distal portion of LAD away from the radiolucent lesion. With an intravascular aspiration catheter (7Fr Thrombuster III, Kaneka Medical Products), we obtained pieces of the culprit material from the lesion (Panel B). A large vegetation on the aortic valve revealed by echocardiography (Panel C, see Supplementary material online, Video S2), isolation of Staphylococcus aureus in two consecutive blood samples and distinct skin lesions led to the definitive diagnosis of infective endocarditis.

Histologically, the aspirated material was comprised of many colonies of Gram-positive cocci and the surfaces of the aspirate were covered with inflammatory exudates (Panel D, Hematoxylin and Eosin staining), which strongly indicated that AMI was caused by the emboli of pieces of vegetation broken off from the cardiac valve.

This case is notable since histological examination of coronary aspirates from a living subject enabled us to identify septic embolism as the cause of AMI.

Ao, aorta; LA, left atrium; LAD, left anterior descending coronary artery; LV, left ventricle; Vege, vegetation.

Supplementary material is available at European Heart Journal online.