

综述

耳蜗植入患者接受MRI 检查的兼容性及安全性

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摘要:

随着核磁共振成像(MRI)扫描使用的磁场加强,以及接受耳蜗植入(CI)的患者数目急剧增加,耳蜗植入患者接受MRI 检查的兼容性和安全性越来越受到关注。本综述总结了MRI 和CIs 之间存在的相互作用,并评估了不同CI 系统接受0.2, 0.3, 1.0, 1.5, 3.0 tesla (T) MRI 检查的兼容性和安全性。总之,CIs 是MRI 检查的相对禁忌,耳蜗植入患者在接受MRI 检查前必须对其风险进行严格评估,并采取有效的保护措施以保证受检者的安全。

关键词: 核磁共振成像 耳蜗植入 兼容性 安全性

MRI compatibility and safety of cochlear implants

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Abstract:

The increasing magnetic strengths used for magnetic resonance imaging (MRI) combined with a greater number of MRI patients with cochlear implants (CIs) raises possible safety issues. This paper reviews the interactions between MRI and CI, and assesses MRI compatibility and safety of CIs at 0.2, 0.3, 1.0, 1.5 and 3.0 tesla (T). In a word, CIs represent a significant contraindication to MRI. Only after careful evaluation of the individual risk and careful preparations can an MRI be safely performed.

Keywords: magnetic resonance imaging cochlear implant compatibility safety

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