

徐光青, 兰月, 何小飞, 赵江莉, 黄东锋. 右侧额顶网络在空间注意认知过程中的作用机制[J]. 中国康复医学杂志, 2013, (8): 714-718

右侧额顶网络在空间注意认知过程中的作用机制 [点此下载全文](#)

[徐光青](#) [兰月](#) [何小飞](#) [赵江莉](#) [黄东锋](#)

中山大学附属第一医院康复医学科, 广州, 510080

基金项目: 国家自然科学基金资助项目(81071608)

DOI:

摘要点击次数: 65

全文下载次数: 47

摘要:

**摘要目的:** 探讨右侧额顶网络(FPN)与视空间注意认知功能的关联性和作用机制。**方法:** 选取志愿受试者60人参加本实验, 随机分为顶叶组和额叶组。采用持续短阵快速脉冲(cTBS)经颅磁刺激(rTMS)右侧背外侧前额叶(DLPFC)和后顶叶皮质(DPC)后进行注意网络测试(ANT), 所有受试者均按照随机顺序进行真/假刺激。结果: 持续短阵快速脉冲经颅磁刺激施加于前额叶和后顶叶, 不同提示和刺激类型的平均反应时均无明显改变。右侧后顶叶抑制, 警觉和定向功能受损( $P<0.05$ ); 右侧额叶抑制, 执行功能受损( $P<0.05$ ), 而定向功能增强( $P<0.05$ )。结论: 在视空间注意过程中, 右侧后顶叶是定向功能的关键区, 右侧前额叶是执行功能的关键区, 并且右侧额顶区之间存在竞争性抑制现象。

**关键词:** [后顶叶](#) [前额叶](#) [视空间注意](#) [重复经颅磁刺激](#)

Modulatory effects of continuous theta burst stimulation over the right frontoparietal network on visuospatial attention [Download Fulltext](#)

Department of Rehabilitation Medicine, the First Affiliated Hospital of Sun Yat-Sen University, Guangzhou, 510080

Fund Project:

Abstract:

**Abstract Objective:** To probe the modulatory effects of continuous theta burst stimulation over the right frontoparietal network(FPN) on visuospatial attention using attention network test (ANT) paradigm in healthy human subjects. **Method:** Sixty healthy, right-handed volunteers (30 males and 30 females) aged between 19 and 23 years were recruited. They were divided into two groups as frontal group and parietal group in accordance with sex for the dorsolateral prefrontal cortex (DLPFC) and the posterior parietal cortex (PPC) stimuli studies, respectively. The ANT was used to test subjects following the continuous theta burst stimulation (cTBS) of repetitive transcranial magnetic stimulation(rTMS) to either the right DLPFC or the right PPC. The ANT provided measures for three different components of visual attention: alerting, orienting and executive control. **Result:** During the ANT task, subjects with real right-PPC cTBS showed significant deficits in network effect indices compared with the shams on the alerting and orienting. Moreover, compared with the sham cTBS condition, the real right-DLPFC cTBS resulted in significant decreases in the efficiency of the conflict, but significant increase in the orienting index. **Conclusion:** These findings suggested that the right DLPFC played a crucial role in the executive control processes, and right PPC associated with orienting attentional function. Furthermore, the results of this studies supported a theory of intra-hemispheric competition within one hemisphere in the visuospatial attention network.

**Keywords:** [posterior parietal cortex](#) [prefrontal cortex](#) [visuospatial attention](#) [repetitive transcranial magnetic stimulation](#)

[查看全文](#) [查看/发表评论](#) [下载PDF阅读器](#)

您是本站第 2822803 位访问者

版权所有: 中国康复医学会

主管单位: 卫生部 主办单位: 中国康复医学会

地址: 北京市和平街北口中日友好医院 邮政编码: 100029 电话: 010-64218095 传真: 010-64218095

本系统由北京勤云科技发展有限公司设计 京ICP备10000329号