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论著

舍曲林抗新生隐球菌的体外及动物实验研究

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摘要： 目的 评估舍曲林抗新生隐球菌的效果。方法 实验分为6组,分别为空白对照组、10 mg/mL氟康唑、10 mg/mL舍曲林、20 mg/mL舍曲林、10 mg/mL氟康唑联用10 mg/mL舍曲林以及10 mg/mL氟康唑联用20 mg/mL舍曲林组。通过体外药敏试验及BALBc小鼠新生隐球菌动物探讨各组间抗隐球菌效果的差异。结果 体外药敏试验发现舍曲林可有效降低新生隐球菌菌落数,当与氟康唑联用时抑菌效果更显著。动物实验发现2种浓度的舍曲林都可明显降低感染小鼠实验早期脑、肺组织的新生隐球菌菌落数,但在实验后期,低浓度的舍曲林对感染小鼠脑组织失去抑菌作用。脑、肺组织中,舍曲林治疗对新生隐球菌的抗菌效果均不如氟康唑。舍曲林与氟康唑联合用药对新生隐球菌模型小鼠肺组织的抗菌效果强于单用舍曲林或氟康唑。结论 舍曲林具有抗新生隐球菌的作用,当与氟康唑联合用药时可起到协同作用。

关键词： 新生隐球菌 舍曲林 体外实验 动物实验

Anti-fungal effect of sertraline on *Cryptococcus neoformans* in vitro and in vivo

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Abstract: Objective To assess the efficacy of sertraline on *Cryptococcus neoformans*.Methods Fungal-loaded mice were treated by fluconazole(10 mg/mL),sertraline(10 mg/mL,20 mg/mL),or fluconazole combined with sertraline(10 mg/mL & 10 mg/mL,10 mg/mL & 20 mg/mL).Drug-sensitivity tests were performed in vitro with different concentrations of sertraline and fluconazole above.Results Colony numbers of *Cryptococcus neoformans* decreased in vitro in sertraline group,while much more evidently in combination group of sertraline and fluconazole.In the early stage,both concentrations of sertraline could significantly decrease the colony numbers of *Cryptococcus neoformans* in lung and brain tissue.However,in the later stage,10 mg/mL of sertraline showed no anti-fungal effect in brain tissue.Fluconazole was superior to sertraline in lung and brain tissue,and much more efficient in antifungal therapy when combined with sertraline.Conclusions Sertraline is efficient on *Cryptococcus neoformans*,and may have synergistic action to fluconazole.

Keywords: *Cryptococcus neoformans* sertraline *in vitro* *in vivo*

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