

论著

小鼠烟曲霉角膜炎的实验研究

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摘要: 目的 比较伊曲康唑和氟康唑对烟曲霉的体外抗菌活性,观察伊曲康唑对小鼠烟曲霉角膜炎的治疗作用。方法 通过角膜基质注射法建立烟曲霉角膜炎小鼠模型。造模后观察角膜病变,取角膜病变处分泌物做真菌镜检、真菌培养以证实造模成功。用药基法检测伊曲康唑和氟康唑对烟曲霉的最低抑菌浓度(MIC)和最低杀菌浓度(MFC)。对烟曲霉角膜炎小鼠给予伊曲康唑治疗,治疗结束行临床评分、炎性评分、菌落形成单位测定以评价疗效。结果 伊曲康唑对烟曲霉的MIC和MFC分别为6.25μg/mL、12.5μg/mL;氟康唑对烟曲霉的MIC和MFC分别为500μg/mL、1000μg/mL。伊曲康唑治疗组临床评分、炎性评分和测定的菌落数较对照组均明显减少($P<0.05$)。结论 伊曲康唑对烟曲霉的体外抗菌活性优于氟康唑,并且对烟曲霉性角膜炎有明显疗效。

关键词: 伊曲康唑 氟康唑 烟曲霉角膜炎

Therapeutic efficacy of itraconazole against *Aspergillus fumigatus* keratitis

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Abstract: Objective To compare the antifungal activity of itraconazole against *Aspergillus fumigatus* with fluconazole *in vitro* and to evaluate the therapeutic efficacy of itraconazole against *Aspergillus fumigatus* keratitis in mice. Methods Mice model of *Aspergillus fumigatus* keratitis was set up by intrastromal injection and confirmed by microscopy and fungal culture. Minimal inhibitory concentration (MIC) and minimal fungicidal concentration(MFC) of itraconazole and fluconazole to *Aspergillus fumigatus* were determined by agar dilution method. Mice with *Aspergillus fumigatus* keratitis were treated by itraconazole. Clinical assessment, inflammatory evaluation and colony-forming unit(CFU) counting were recorded by the end of the treatment. Results The MICs and MFCs of itraconazole and fluconazole to *Aspergillus fumigatus* were 6.25 μg/mL and 12.5 μg/mL, 500 μg/mL and 1 000 μg/mL, respectively. Compared with control group, mice treated by itraconazole showed significant improvement in clinical assessment, inflammatory evaluation and CFU counting ($P<0.05$). Conclusions Itraconazole is superior to fluconazole in the treatment of *Aspergillus fumigatus* keratitis *in vitro*.

Keywords: itraconazole; fluconazole *Aspergillus fumigatus* keratitis

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