

论著

## 特比萘芬与其他抗真菌药物对外阴阴道念珠菌病病原菌的体外相互作用研究

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**摘要:** 目的 了解特比萘芬(TEB)分别与氟康唑(FLU)、伊曲康唑(ITR)、咪康唑(MCZ)、克霉唑(CMZ)及制霉菌素(NYS)联合对外阴阴道念珠菌病患者分离的念珠菌体外相互作用。方法 受试念珠菌株46株,包括白念珠菌(20株)、热带念珠菌(15株)、光滑念珠菌(4株)、克柔念珠菌(3株)、近平滑念珠菌(3株)和季也蒙念珠菌(1株)。方法参考CLSI M27-A3方案中的微量液基稀释法,观察各药单独和联合后的MIC,并计算FICI。结果 TEB、FLU、ITR、MCZ、CMZ和NYS的单药MIC范围分别为0.5~256 μg/mL、0.5~128 μg/mL、0.5~32.0 μg/mL、0.125~16 μg/mL、0.03~4.0 μg/mL和2~8 μg/mL。当TEB与FLU、ITR、MCZ和CMZ联合时,对白念珠菌表现为协同作用的分别为100%(20/20)、80%(16/20)、55%(11/20)和90%(18/20);对1株季也蒙念珠菌均显示为协同作用;对热带念珠菌,TEB分别与上述4种唑类药物联合时,显示有协同作用的分别为67%(10/15)、60%(9/15)、20%(3/15)和20%(3/15);TEB与唑类药物联合对光滑念珠菌、克柔念珠菌和近平滑念珠菌均无协同作用;TEB与NYS联合时对所有菌株均无协同作用。结论 TEB与唑类药物联合对不同种的念珠菌显示有不同的效应,但对外阴阴道念珠菌病主要的致病菌白念珠菌显示有良好的协同作用。TEB与NYS联合对念珠菌均无协同作用。

**关键词:** 特比萘芬 药物联合 念珠菌 外阴阴道念珠菌病

*In vitro activity of terbinafine in combinations with other antifungi drugs against clinical pathogenic fungi of vulvovaginal candidiasis*

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**Abstract:** Objective To investigate the in vitro activity of terbinafine(TEB)in combinations with, itraconazole(ITC) fluconazole(FLC), clotrimazole(CMZ); miconazole(MCZ) and nystatin(NYS) against clinical isolates of vulvovaginal candidiasis.Methods The minimal inhibitory concentrations(MICs)of TEB, FLU, ITR, MCZ, CMZ and NYS against 46 strains of *Candida* were determined by using CLSI broth microdilution method(M27-A3).Additionally, the interactions of TEB with ITR,FLU,MCZ, CMZ and NYS, were assessed by using the checkerboard technique. The fractional inhibitory concentration index(FICI) was used to categorize drug interactions as following, synergy, FICI≤0.5; indifference, FICI>0.5 and≤4.0; or antagonism, FICI>4.0.Results The MIC ranges of TEB, FLU, ITR, MCZ, CMZ and NYS against *Candida* spp were 0.5-256 μg/mL,0.5-128 μg/mL,0.5-32.0 μg/mL,0.125-16 μg/mL,0.03-4.0 μg/mL and 2-8 μg/mL, respectively. The combinations of TEB with FLU, ITR, MCZ, CMZ showed synergic effects are 20/20(100%), 16/20(80%), 11/20(55%)and 18/20(90%)in *C.albicans* isolates, respectively. Besides, the combinations of TEB with FLU, ITR, MCZ and CMZ showed indifference against *Candida krusei*,*Candida parapsilosis* and *Candida glabrata*. The combinations of TEB with all the azoles showed synergic for *Candida guilliermondii*. The combinations of TEB with FLU, ITR, MCZ, CMZ showed synergic effects are 67%,60%,20% and 20% in *Candida tropicalis*, respectively. There was not synergic effect when TEB combined with NYS in all strains.Conclusions Different *Candida* spp show different effects to the combinations of TEB with azoles. There is not synergic effect when TEB in combination with NYS for all strains.

**Keywords:** terbinafine drug combinations *Candida* spp vulvovaginal candidiasis

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