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论文

硝唑尼特对杜氏利什曼原虫体内药效活性研究

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摘要:

为观察硝唑尼特对感染杜氏利什曼原虫小鼠的保护效果,将杜氏利什曼原虫前鞭毛体接种昆明小鼠,饲养30 d后每天灌服3个浓度(400, 200, 100 mg/kg)的硝唑尼特,并设阴性(玉米油)、阳性(两性霉素B)对照,连续给药10 d,治疗结束10 d后处死,分别以有限稀释法、荧光定量PCR法和肝组织HE染色检测药物治疗效果。结果显示,400 mg/(kg•d)的硝唑尼特能明显减少小鼠体内杜氏利什曼原虫数(P<005),有限稀释法和荧光定量PCR法显示其对肝、脾的抑虫率分别为91 54%、92 05%和90 97%、91 63%;200, 100mg/(kg•d) 药物组同样具有一定的抑虫效果。结果表明:硝唑尼特对体内杜氏利什曼原虫具有较好的药效活性,并具有剂量效应相关性。

关键词: 硝唑尼特 杜氏利什曼原虫 黑热病 药效

In Vivo Activity of Nitazoxanide against Leishmania donovani

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Abstract:

To observe the activity of nitazoxanide against Leishmania donovani in vivo. KM mice were inoculated with promastigotes, 5 groups were designed including 3 groups of different concentrations of nitazoxanide(400, 200, 100 mg / kg), the negative group(corn oil) and the positive group (amphotericin B),which were given corresponding agents orally for 10 days successively 30 days after inoculation, the mice were executed 10 days after the end of administration, the drug treatment effects were detected by limiting dilution assay, fluorescent quantization PCR method and HE staining of hepatic tissue, the results showed 400 mg / (kg • d) group of nitazoxanide could reduce the number of Leishmania donovani obviously(P <0 05) and in the 200, 100 mg / (kg • d) groups certain inhibition effects could also be detected. Nitazoxanide has a good activity against Leishmania donovaniin vivo and a correlation between dosage and effect.

Keywords: nitazoxanide; Leishmania donovani ; Kala azar; drug action

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