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【病例报告】

HIV感染者检出粪类圆线虫幼虫 1 例

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2006 年 4~12 月, 作者等北京军区总医院共 43 人组成中国维和医疗分队赴利比里亚执行维和任务。在利比里亚第四战区维和二级医院诊治期间, 发现 1 例 HIV 感染者合并粪类圆线虫感染, 报告如下。

患者, 男, 31 岁, 埃塞俄比亚人, 利比里亚维和士兵。因消瘦 7 个月, 干咳 2 周, 短暂性意识障碍 3 h, 于 2006 年 12 月 14 日下午入院。该患者 2006 年 4 月前由埃塞俄比亚到利比里亚执行维和任务, 进入任务区即出现无明显诱因而持续性消瘦, 无腹痛、腹泻等, 7 个月内体重减轻 13 kg, 未就医。12 月初出现干咳, 时感低热, 无胸痛气喘, 未就医。12 月 11 日开始盗汗伴食欲不振。12 月 14 日上午(于就诊前 3 h)在执勤中突发晕厥, 无抽搐及呕吐, 即刻送往利比里亚第四战区维和二级医院救治。该患者既往有肺结核病史, 有婚外史, 无吸毒史。入院查体: 消瘦, 神清, 浅表淋巴结未触及; 胸廓对称, 两下肺可闻及湿啰音, 左侧明显; 腹平软, 肝、脾肋缘下未触及; 生理反射存在, 未引出病理反射。实验室检查: 白细胞  $5.9 \times 10^9/L$ , 红细胞  $3.91 \times 10^{12}/L$ , 血小板  $191 \times 10^9/L$ , 中性粒

细胞占 69.4%, 淋巴细胞占 9.7%, 红细胞压积(HCT)0.292, 血沉 63 mm/h, 谷草转氨酶 (AST) 46  $\mu/L$ , 总蛋白 49.9 g/L, 白蛋白 23.2 g/L, 电解质、血脂、肾功能、血糖及尿常规等其他均正常。HIV 抗体阳性, HBsAg、丙型肝炎抗体 (HCV) 阴性。四联毒品尿检阴性。胸部 X 线显示双肺浸润、左侧明显。粪常规检查: 黄色糊状, 低倍镜下( $\times 100$ )可见大量可活动的虫体。取粪便少许(约绿豆大)经处理后, 取样涂片低倍镜下观察: 虫体细长, 约为 0.3~0.5 mm, 无色透明, 呈反 S 形或 C 形。高倍镜下 ( $\times 400$ )观察: 头端钝圆, 咽管呈柱状, 口腔短而浅, 食道前后膨胀, 中间狭窄, 生殖原基较大, 生殖孔位于虫体后 1/3 处, 尾端尖细(图 1)。符合粪类圆线虫的特征, 确定为粪类圆线虫杆状蚴。隐血试验阴性。诊断为 HIV 合并粪类圆线虫感染, 不排除肺结核。给予支持性疗



图 1 粪类圆线虫杆状蚴( $\times 400$ )

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较高, 74.7%大于 1 000 个/μl, 两法检测结果不一致的比例较低, 镜检法误诊漏检率为 6.4%(15/234), 如在常规监测低密度带虫比例较高时, 镜检法误诊(或漏检)的情况会更加严重。

UT-PCR 法使用的 D1、D2 两管试剂, 包括除 *Taq* DNA 酶外的全部试剂, 采用简易的滤纸采样和模板 DNA 制备法, 试验步骤简化为单管 2 步扩增, 试剂和耗材仅为常规套式 PCR 的 1/3~1/5<sup>[10]</sup>, 费用大幅度下降, 2 步反应时间缩短为 3 h 40 min, 能够同时检出恶性疟原虫和间日疟原虫。只要具备 PCR 仪和电泳仪, 普通实验室即可完成套式/多重 PCR, 进行疟疾的确诊和鉴别诊断。特别适用于疟疾监测、防治研究和药物疫苗研究中检测大量样本, 可提高疟疾监测的效率和质量。

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法(左氧氟沙星和甲基强地松龙及大量液体对症治疗), 体温下降 2 d 后给予维持治疗方案。由于作者等在利比里亚维和二级医院执行任务期即将结束, 且所携带驱虫药物已用完, 故该患者在入院后第 5 天转送至其首都蒙罗维亚的约旦维和三级医院继续治疗。

### 讨 论

粪类圆线虫是一种广泛分布于热带和亚热带地区的肠道线虫, 感染人体机率很低(约 2%以下), 国内仅有散在的报道<sup>[1]</sup>。该虫常定居于小肠, 还可定居于肺部, 寄生肺部的雌虫, 侵入支气管产卵, 孵出杆状蚴随痰排出<sup>[2]</sup>。严重感染可致多个脏器受损, 甚至危及生命<sup>[3]</sup>。

机体免疫力低下和应用免疫抑制剂是粪类圆线虫重症感染的主要因素。粪类圆线虫轻度感染可无任何症状, 但 HIV 感染者自身免疫力低下, 使粪类圆线虫在体内大量繁殖, 加重了患者的营养不良。本例患者可能在出国前已感染 HIV, 在赴利比里亚维和期间发病, 表现为体重锐减。通常罹患肠道粪类圆线虫感染者可出现灼烧样腹痛伴有腹泻, 粪便隐血等。但该患者却无明显的临床症状, 粪便隐血试验为阴性, 易被漏诊或误

诊。另外, 该患者肺部症状较重, X 线显示肺部炎性病变, 但其无痰, 故未做痰检, 但不排除肺部感染粪类圆线虫杆状蚴。本文提示 HIV 感染者, 在积极治疗原发病的同时, 应注意预防粪类圆线虫感染。

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