对深入探讨TCF4基因功能会带来一些新的线索。随着研究的深入,TCF4N在肿瘤中的作用和应用将会取得新的进展。

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个案与短篇

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肺吸虫致感染性颅内动脉瘤1例

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[**关键词**] 肺吸虫;感染性颅内动脉瘤

[**中图法分类号**] R532.2;R743 [**文献标志码**] B

1 临床资料

患儿,男性,6岁8个月,因头痛伴频繁呕吐3 d入院。以头痛和呕吐为主要表现,左额部明显,呈阵发性,频繁呕吐,伴有发热,有食用生水、小龙虾和河蟹病史。入院查体:体温38.5 ℃,意识清楚,呈嗜睡状,语言明确,双侧瞳孔等大同圆3 mm,四肢肌力Ⅴ级,肌张力正常,双侧Babinski征(-),全身无包块。辅助检查:血液分析:白细胞9.08×10^9/L,嗜酸性粒细胞百分比0.23,嗜酸性粒细胞计数2.6×10^9/L;肺吸虫抗体(+);腰穿抽取脑脊液呈微红,潘式试验(±),白细胞5×10^6/L。胸片提示:心肺未见异常。心脏彩超提示:未见异常。头部CT提示:左侧额颞顶叶呈团片状混杂密度影,周围可见低密度水肿带,增强后未见强化。CTA:左侧大脑中动脉M3段可见一囊性扩张,大小约3.5 mm×3.5 mm(图1)。全脑血管造影(DSA)提示:左侧大脑中动脉末端可见一扩张梭形动脉瘤,直径约4 mm(图2)。诊断:肺吸虫脑病,感染性颅内动脉瘤。给予降颅压、营养神经等治疗。同时口服吡喹酮0.5 g,每日2次,服用3 d,停4 d,连续服用4周。4周后复查:症状消失,复查血液分析:白细胞6.24×10^9/L,嗜酸性粒细胞百分比0.03,嗜酸性粒细胞计数0.4×10^9/L;肺吸虫抗体(-)。3年后复查头部MRA提示:左额叶软化灶,左侧大脑中动脉M3段一分支处可见瘤样扩张,直径约3.6 mm。嘱患儿密切随访。

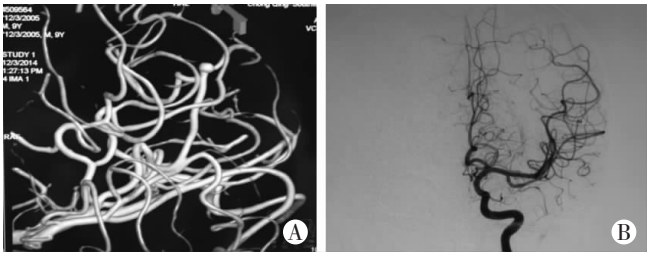


图1 肺吸虫致感染性颅内动脉瘤患儿CTA表现

图2 肺吸虫致感染性颅内动脉瘤患儿DSA表现

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2 讨论

感染性颅内动脉瘤是指各种感染因素破坏颅内动脉壁,使得动脉壁变得薄弱而导致局部扩张、膨大成囊状或梭状,好发于动脉的远端,男女比率为2:1[1],多发生于儿童[2],常继发于亚急性心内膜炎[3],早期诊断困难,易漏诊和误诊。本例患儿是1例6岁儿童由肺吸虫感染引起的颅内动脉瘤。

导致感染性颅内动脉瘤的致病原较多,包括细菌、真菌、病毒、寄生虫、药物、手术创伤等,吸食毒品、化疗药物使用[1]及植物性因素也可引起感染性颅内动脉瘤。寄生虫感染性颅内动脉瘤较少。本例患儿是通过食用含有肺吸虫活囊蚴食物感染机体,肺吸虫活囊蚴在肠腔脱囊,穿过肠壁进入腹腔,沿颈动脉周围软组织上行,经颈动脉管和破裂孔入颅腔,寄生于附近脑组织,对附近脑组织和血管造成机械性损伤,通过释放其代谢性产物引起免疫病理等反应。感染性颅内动脉瘤则由寄生于大脑的囊蚴代谢产物脱落后沿着血流方向堵塞大脑中动脉远端小血管,对局部血管壁产生炎症反应,使血管变薄,扩张形成的动脉瘤。这理论被Chen等[4]证实。

感染性颅内动脉瘤破裂出血是其急性临床表现,头痛和发热为慢性临床表现。本例患儿以颅内动脉瘤破裂出血急诊入院,表现为头痛和频繁呕吐、发热,既有感染症状、又有颅内出血症状,符合感染性颅内动脉瘤的表现。

血液分析和血培养是常规检验方法。超声心动图能发现心脏病变,可以帮助诊断。头部CT是首选检查,可明确有无颅内出血。CTA或MRA对于较小动脉瘤敏感性较低,高分辨率CTA或MRI可显示瘤体和瘤腔内血栓的情况。DSA是诊断动脉瘤的金标准,感染性颅内动脉瘤的部位常位于大脑动脉的外周端,直径一般较小,呈梭状或囊状。本例病案是经DSA证实在左侧大脑中动脉末端可见一扩张囊性动脉瘤,直径约4 mm,患儿同时有发热表现、来自疫区、明确食用生水、小龙虾和河蟹病史,血液分析嗜酸性比例及绝对值增高,肺吸虫抗体(+),治疗1个月后复查肺吸虫抗体(-),结合病史、症状和辅助检查可以明确诊断。

破裂的感染性颅内动脉瘤具有很高的外科手术风险,抗菌药物或驱虫药物保守治疗是主要的治疗方式。血培养或者脑脊液培养可以指导抗菌药物的使用。若培养是阴性,根据病史和临床症状,可以经验用药。一般需要4~6周的药物治疗。血管造影术可用于保守治疗患者的监测和随访。保守治疗可使感染性颅内动脉瘤尺寸变小、保持不变或长大、消失或者产生新的动脉瘤。如果经药物保守治疗后,感染性动脉瘤增大或者产生新的动脉瘤,在手术能够达到的区域,可以实施介入手术或者开颅手术。外科开颅手术适应证是有占位效应或有颅内高压症状,且外科手术能够达到病变区域。Zanaty等[5]提出是否行介入手术得根据动脉瘤的形状和具体位置来决定,是否能够安全达到载瘤动脉,患者是否需要心脏手术以及患者自身情况而定。如能顺利达到载瘤动脉,且有需要心脏手术的患者,一般情况较好可行介入手术[6]。本例患儿意识清楚,一般情况尚可,CT提示颅内有出血、但无占位效应,中心结构无移位,且DSA显示动脉瘤位于大脑中动脉末端,呈梭形,且供血区域处于重要功能区,加之患儿是因为肺吸虫感染所致,无需行心脏手术,故采用药物驱虫治疗,治疗4周后,复查肺吸虫抗体(-),3年后复查MRA动脉瘤有所减小,患儿治疗有效,我们将继续随访。

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