消化系统疾病

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# 孤立性直肠结核 1 例并文献复习

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【摘　要】**目的**:报告 1 例孤立性直肠结核患者的诊治过程,并综合国内外文献进行讨论,以提高对此病的认识。**方法**:对本院收治的 1 例孤立性直肠结核患者的临床表现、实验室检查、内镜及病理资料、诊断和治疗进行分析,并结合文献加以讨论。**结果**:本例患者以腹痛、排脓血便及消瘦入院,肠镜提示孤立性直肠巨大溃疡,病理检查未发现干酪样肉芽肿和抗酸杆菌,粪便细菌培养和结核杆菌聚合酶链反应(tuberculosis polymerase chain reaction,TB-PCR)阴性,结核菌素纯蛋白衍生物(tuberculin purified protein derivative,TB-PPD)+++,未见直肠外结核感染证据。诊断性抗结核治疗 3 个月后患者临床症状明显缓解,内镜下直肠溃疡较前好转,持续规范抗结核治疗 15 个月后痊愈,随访至今未见复发。**结论**:孤立性直肠结核临床罕见,缺乏特异的临床、影像及内镜下表现,易导致误诊。病理发现干酪样肉芽肿和抗酸杆菌阳性率低;结核菌素试验和诊断性抗结核简单、有效,对提高结核诊断率仍有重要意义。

【关键词】孤立性;直肠;结核;诊断性抗结核;治疗
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## Isolated rectal tuberculosis: a case report and review of literature

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【Abstract】***Objective***: To report a case of isolated rectal *tuberculosis* (TB), and to made a literature review to improve the understanding of this rare condition. ***Methods***: The data of clinical features, laboratory examinations, endoscopic manifestations, pathological characteristics, diagnosis and therapy of one patient with isolated rectal TB in our hospital were collected. Moreover, literature was summarized and compared. ***Results***: The patient was hospitalized for abdominal pain, bloody purulent stool and emaciation. Endoscopy showed a huge isolated rectal ulcer. However, histopathologic biopsy found no caseating granuloma or acid-fast bacilli. Multiple acid-fast stool cultures and TB polymerase chain reaction (TB-PCR) assay were also negative. But the tuberculin purified protein derivative (TB-PPD) skin test was strongly positive. In addition, there was no evidence of parenteral tuberculosis infection. Moreover, after 3 months of diagnostic anti-TB treatment, the patient had a clinical remission. Endoscopy revealed the rectal lesion was much improved. The rectal ulcer was healed after a continuous anti-TB therapy of 15 months, no recurrence was occurred up to now. ***Conclusion***: Isolated rectal TB is a rare disease without characteristic clinical, imaging and endoscopic features. The positive rates of caseating granuloma or acid-fast bacilli found by histopathologic biopsy are rather low. However, TB-PPD test and diagnostic anti-TB treatmet are simple but effective strategies, which have important value for increasing the diagnosing rate of TB.

【Key words】isolated; rectal; *tuberculosis*; diagnostic anti-TB; treatment

肠结核(*intestinal tuberculosis*,ITB)是由结核杆菌侵犯肠道而引起的慢性特异性感染,绝大多数继发于肠外结核,特别是肺结核[1]。ITB 好发于回盲部、回肠末端、升结肠等,单独累及直肠罕见[2]。我院于 2012 年收治 1 例孤立性直肠结核患者,现将其诊治过程详细报告如下,并通过文献复习总结相关临床问题,旨在提高对此病的认识,避免误诊误治。

## 1　临床资料

患者,女性,29 岁,职业民工,因“反复腹痛伴排脓血便 1 年余”入院。患者发病前曾因排便困难予“竹筷”插入肛门,腹痛以左下腹为主,呈隐痛,排便后缓解,向左臀部放射。排脓血便 2~5 次/d,脓血与粪便混合,伴里急后重,无午后低热、盗汗、咳嗽、咳痰等。外院肠镜示直肠巨大溃疡,病理未见恶

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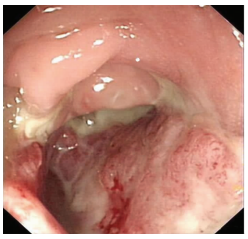
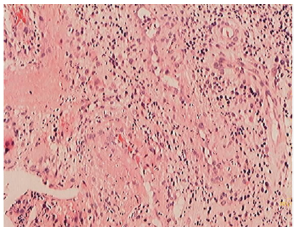
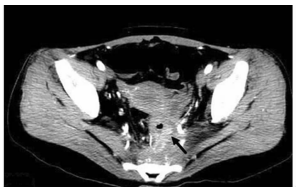
性细胞，考虑慢性溃疡。曾予美沙拉嗪（口服+塞肛）联合双歧杆菌治疗半年余无效，近期体质量下降约 10 kg。既往有“甲亢”病史，无结核密切接触史，月经婚育史、家族史无特殊。查体：轻度贫血貌，左下腹轻压痛，余无特殊。入院后查血常规、生化、血沉（erythrocyte sedimentation rate，ESR）、超敏 C 反应蛋白（hypersensitive C-reactive protein，Hs-CRP）、粪便常规详见表 1。TB-PPD（+++），多次查粪便细菌培养、寄生虫集卵、粪便 TB-PCR 阴性，肿瘤标志物（AFP、CEA、CA125、CA199 和 CA242）、甲状腺功能、TB-ab、HIV、HBV、pANCA、自身抗体谱、胸片、腹部及泌尿系 B 超未见明显异常，盆腔 B 超考虑左侧卵巢囊肿。胃镜：慢性浅表性胃炎，消化道造影未见小肠器质性病变，肠镜、病理及腹部 CT 如图 1 所示。综合考虑患者诊断直肠结核可能性大，克罗恩病不排除，予异烟肼+利福平+吡嗪酰胺诊断性抗结核联合美沙拉嗪局部塞肛治疗。3 个月后患者腹痛好转，脓血便减少为 2~3 次/d，查体左下腹轻压痛，余无特殊，复查肠镜见直肠溃疡较前好转（图 2A）。6 个月后患者无腹痛，排成形软便 2~3 次/d，间有少许脓血，查体未见明显异常，外院结核感染 T 细胞斑点试验（T-SPOT.TB）阴性，停用美沙拉嗪（图 3）。抗结核治疗 12 个月后患者无特殊不适，复查肠镜见直肠溃疡继续好转（图 4A）。治疗 15 个月后，患者体质量较入院治疗前上升 8 kg，复查 TB-PPD（+），肠镜示直肠溃疡愈合（图 5A），遂停用抗结核药物，定期随访至今未见复发。



A. 肠镜见直肠巨大溃疡性病变



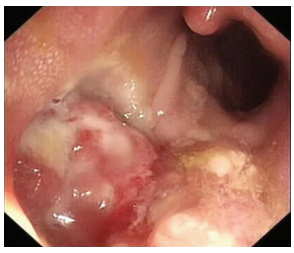
B. 肉芽组织，有坏死，符合溃疡（HE×100），抗酸染色（-）



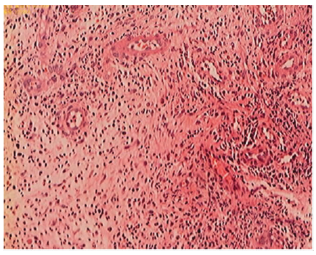
C. 腹部 CT 扫描见直肠占位性病变，侵犯左侧盆壁（见黑色箭头）

**图 1　孤立性直肠结核治疗前肠镜、病理及腹部 CT 表现**

Fig.1　Endoscopy，pathological and abdominal CT manifestations of isolated rectal TB before anti-TB treatment



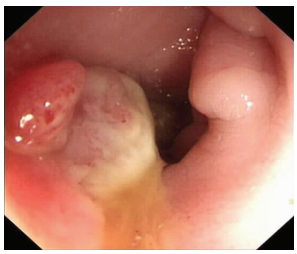
A. 肠镜见直肠溃疡性病变较前改善，局部息肉样增生



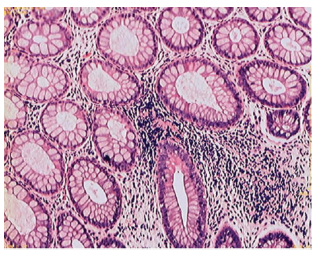
B. 黏膜慢性炎伴急性活动，另见较多炎性肉芽组织（HE ×100），抗酸染色（-）

**图 2　孤立性直肠结核治疗 3 个月后肠镜、病理观察**

Fig.2　Colonoscopy and pathological manifestations of isolated rectal TB after 3 months of anti-TB treatment



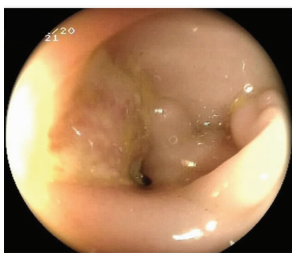
A. 肠镜见直肠慢性溃疡愈合状态，局部息肉样增生



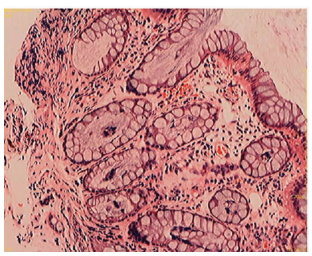
B. 黏膜慢性炎（HE×100），抗酸染色（-）

**图 3　孤立性直肠结核治疗 6 个月后肠镜、病理观察**

Fig.3　Colonoscopy and pathological manifestations of isolated rectal TB after 6 months of anti-TB treatment



A. 肠镜见直肠溃疡较前好转



B. 黏膜慢性炎（HE ×100），抗酸染色（-）

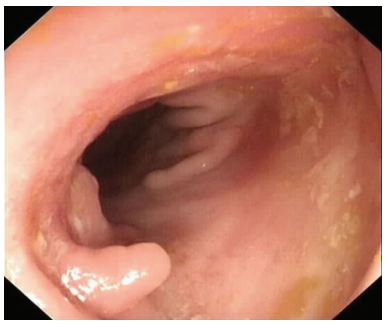
**图 4　孤立性直肠结核治疗 12 个月后肠镜、病理观察**

Fig.4　Colonoscopy and pathological manifestations of isolated rectal TB after 12 months of anti-TB treatment

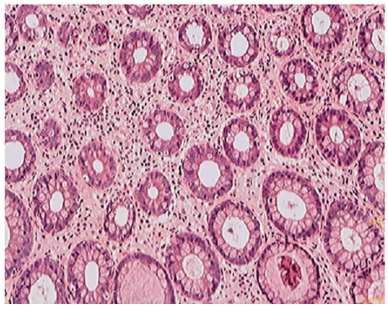
**表 1　患者抗结核过程血常规、生化、粪便常规及体质量等指标变化**

Tab.1　Change of blood routine tests，biochemical tests，stool routine tests and weight of the patient during the course of anti-TB treatment

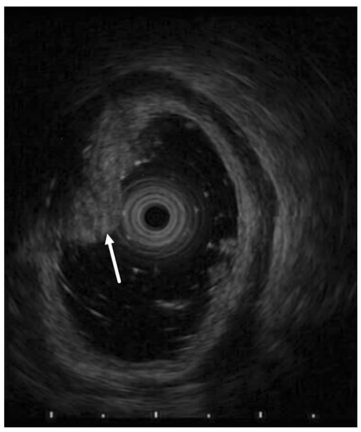
| 时间 | WBC（$10^9$/L） | HGB（g/L） | ESR（mm/h） | Hs-CRP（mg/L） | ALB（g/L） | 粪便常规 | 体质量（kg） |
|---|---|---|---|---|---|---|---|
| 治疗前 | 8.37 | 91 | 46 | 94.79 | 37.0 | WBC++，RBC+，OB+ | 43 |
| 治疗 3 个月 | 6.23 | 106 | 34 | 10.86 | 36.8 | WBC+，RBC-，OB - | 45 |
| 治疗 6 个月 | 7.11 | 108 | 28 | 0.12 | 41.8 | WBC 0~1/HP，RBC-，OB+ - | 47 |
| 治疗 12 个月 | 8.08 | 122 | 8 | 0.60 | 48.0 | WBC-，RBC-，OB- | 50 |
| 治疗 15 个月 | 5.17 | 116 | 22 | 0.06 | 42.6 | WBC-，RBC-，OB- | 51 |



A. 肠镜见直肠慢性溃疡愈合状态，局部息肉样增生



B. 黏膜慢性炎（HE ×100），抗酸染色（–）



C. 超声肠镜见直肠黏膜层及黏膜下层局部增厚，呈等回声改变，考虑炎性改变（见白色箭头）

**图 5　孤立性直肠结核治疗 15 个月后肠镜、病理、超声肠镜观察**

Fig.5　Colonoscopy，pathological and ultrasound colonoscopy manifestations of isolated rectal TB after 15 months of treatment

## 2　讨　论

ITB按好发部位依次见于回盲部、回肠末端、升结肠、横结肠、降结肠、阑尾及十二指肠等，直肠结核少见且多同时合并其他部位感染[1]。孤立性直肠结核临床更为罕见，查阅国内外文献多为个案报告[2-3]。其感染途径最常见于肺结核患者将带菌食物或痰咽下后经消化道累及，或经全身淋巴系统及血液播散，还可由邻近器官组织如卵巢或肛门部侵犯[3]。本例患者肺、空回肠、结肠、卵巢及全身淋巴系统等均未见结核感染，但发病前曾因排便困难予异物插入肛门，故推测其感染途径可能为结核杆菌经异物带入肛门并定植于破损的直肠黏膜所致。

孤立性直肠结核好发于年轻患者，多以腹痛、便血及排便习惯改变就诊，常伴随低热、盗汗、消瘦、贫血等全身症状，也可出现肠梗阻、直肠脓肿、直肠瘘等[2]。与常见的直肠疾病症状、体征类似，易误诊为直肠恶性肿瘤、克罗恩病、溃疡性直肠炎、孤立性直肠溃疡综合征等[3-6]。病理找到干酪样肉芽肿或抗酸杆菌是 ITB 诊断的金标准，但阳性率较低[1]；影像学检查如腹部 CT 和消化道造影对其诊断与鉴别诊断具有重要参考价值，但特异性不高[7]。结核菌素试验是临床判别结核感染是否存在的重要指标之一，为 ITB 的诊断提供重要线索，但在免疫低下如 HIV 感染及器官移植后患者有较高的假阴性[8]。本例患者以腹痛、便血就诊，伴贫血及消瘦，无发热、盗汗等全身毒血症状。腹部 CT 考虑直肠恶性病变并侵犯盆壁，但肠镜多次深挖大块病理活检均未见恶性细胞，也未见抗酸杆菌、干酪样与非干酪样肉芽肿等特征性表现。然而患者家庭贫困，工作生活卫生条件较差，且入院前曾在外院考虑克罗恩病予美沙拉嗪治疗半年疗效不佳，更为重要的是其 TB-PPD 强阳性提示结核活动的可能。在高度怀疑结核感染时，诊断性抗结核是明确诊断的重要手段[9-10]。该患者经抗结核治疗 3 个月后临床症状明显缓解，体质量上升，贫血改善，炎症指标如 ESR 及 Hs-CRP 显著下降，直肠溃疡面积缩小，进一步支持结核感染的诊断。当然，没有找到组织病理、免疫和病原学等结核感染的证据是本病例的不足。但患者 TB-PPD 强阳性为疑诊结核感染提供了重要线索，且经过价格低廉、操作简单的诊断性抗结核治疗后取得了理想的效果。因此，在贫困落后地区疑诊结核，如缺乏特异性诊断指标，结核菌素试验和诊断性抗结核仍是明确结核感染简单、经济的重要方法[10-11]。

T-SPOT.TB 因对结核现症及潜伏性感染具有较高的敏感性和特异性已广泛应用于临床[12-13]。但 T-SPOT.TB 阳性并不是 ITB 的诊断标准，且操作较为复杂，其结果可能受宿主和环境等多种因素影响。Dheda 等[14]研究发现，抗结核疗程短于和长于 4 个

月的结核患者 T-SPOT.TB 阳性率分别为 83%和 19%($P\leqslant0.01$)，提示长时间抗结核治疗可使大部分患者 T-SPOT.TB 反应呈假阴性。本例患者抗结核治疗前 PPD 强阳性，因条件所限未能完善 T-SPOT.TB 检查，但抗结核 6 个月后在上级医院行 T-SPOT.TB 为阴性，提示长时间抗结核治疗可能影响试验结果的判读。

孤立性直肠结核最重要的治疗手段是抗结核治疗，遵循早期、联合、适量、规律、全程原则，疗程为 6~12 个月，部分迁延难愈者可适当延长疗程[2,15]。本例患者由于溃疡巨大，经规范抗结核治疗 12 个月复查肠镜仍可见直肠浅溃疡，延长疗程至 15 个月才达到肠黏膜完全愈合。而对于引起直肠明显狭窄、直肠瘘、脓肿、大出血及穿孔等则需及时手术治疗，手术前后也应配合适当的抗结核治疗[16-18]。

总之，孤立性直肠结核临床罕见，缺乏特异的临床、影像及内镜下表现，易导致误诊。病理发现干酪样肉芽肿和抗酸杆菌是诊断的金标准，但阳性率低；T-SPOT.TB 可为诊断提供重要线索，但其结果受宿主和环境等多种因素影响，且操作复杂，基层医院难于开展；结核菌素试验和诊断性抗结核简单、易行、有效，对提高结核诊断率仍有重要意义。

**致谢**：本例患者诊治过程中得到中山大学附属第一医院消化内科陈旻湖、曾志荣等教授的大力支持与帮助，在此表示衷心的感谢。

## 参 考 文 献

[1] Almadi MA, Ghosh S, Aljebreen AM. Differentiating intestinal tuberculosis from Crohn's disease: a diagnostic challenge[J]. Am J Gastroenterol, 2009, 104(4): 1003-1012.

[2] Puri AS, Vij JC, Chaudhary A, et al. Diagnosis and outcome of isolated rectal tuberculosis[J]. Dis Colon Rectum, 1996, 39(10): 1126-1129.

[3] Samarasekera DN, Nanayakkara PR. Rectal tuberculosis: a rare cause of recurrent rectal suppuration[J]. Colorectal Dis, 2008, 10(8): 846-847.

[4] Nagar AB. Isolated colonic ulcers: diagnosis and management[J]. Curr Gastroenterol Rep, 2007, 9(5): 422-428.

[5] Kamani L, Ahmed A, Shah M, et al. Rectal tuberculosis: the great mimic[J]. Endoscopy, 2007, 39(S1): E227-E228.

[6] Yajnik V, McDermott S, Khalili H, et al. Case records of the massachusetts general hospital. Case 7-2016. An 80-year-old man with weight loss, abdominal pain, diarrhea, and an lleocecal mass[J]. N Engl J Med, 2016, 374(10): 970-979.

[7] Mao R, Liao WD, He Y, et al. Computed tomographic enterography adds value to colonoscopy in differentiating Crohn's disease from intestinal tuberculosis: a potential diagnostic algorithm[J]. Endoscopy, 2015, 47(4): 322-329.

[8] Khawcharoenporn T, Apisarnthanarak A, Phetsuksiri B, et al. Tuberculin skin test and Quanti FERON-TB Gold In-tube Test for latent tuberculosis in Thai HIV-infected adults[J]. Respirology, 2015, 20(2): 340-347.

[9] Van Rie A, Westreich D, Sanne I. Impact of three empirical antituberculosis treatment strategies for people initiating antiretroviral therapy[J]. Int J Tuberc Lung Dis, 2014, 18(11): 1340-1346.

[10] Loh LC, Abdul Samah SZ, Zainudin A, et al. Pulmonary disease empirically treated as Tuberculosis-a retrospective study of 107 cases [J].Med J Malaysia, 2005, 60(1): 62-70.

[11] Getahun H, Matteelli A, Abubakar I, et al. Management of latent Mycobacterium tuberculosis infection: WHO guidelines for low tuberculosis burden countries[J]. Eur Respir J, 2015, 46(6): 1563-1576.

[12] Latorre I, Carrascosa JM, Vilavella M, et al. Diagnosis of tuberculosis infection by interferon-gamma release assays in patients with psoriasis[J]. J Infect, 2014, 69(6): 600-606.

[13] Ng SC, Hirai HW, Tsoi KK, et al. Systematic review with meta-analysis: accuracy of interferon-gamma releasing assay and anti-Saccharomyces cerevisiae antibody in differentiating intestinal tuberculosis from Crohn's disease in Asians[J]. J Gastroenterol Hepatol, 2014, 29(9): 1664-1670.

[14] Dheda K, Pooran A, Pai M, et al. Interpretation of Mycobacterium tuberculosis antigen-specific IFN-gamma release assays (T-SPOT.TB) and factors that may modulate test results[J]. J Infect, 2007, 55(2): 169-173.

[15] Donoghue HD, Holton J. Intestinal tuberculosis[J]. Curr Opin Infect Dis, 2009, 22(5): 490-496.

[16] Papis D, Branchi V, Gomez L, et al. Abdominal tuberculosis mimicking Crohn's disease's exacerbation: a clinical, diagnostic and surgical dilemma.A case report[J]. Int J Surg Case Rep, 2015, 6(C): 122-125.

[17] Wu YF, Ho CM, Yuan CT, et al. Intestinal tuberculosis previously mistreated as Crohn's disease and complicatd with perforation: a case report and literature review[J]. Springerplus, 2015, 4(1): 1-5.

[18] González-Puga C, Palomeque-Jiménez A, García-Saura PL, et al. Colonic tuberculosis mimicking Crohn's disease: an exceptional cause of massive surgical rectal bleeding[J]. Med Mal Infect, 2015, 45(1-2): 44-46.

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