

高海拔地区肺结核影像表现 65 例回顾分析

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摘要 目的 探讨总结高海拔地区肺结核的影像特点,更好的指导临床早期诊断。方法 回顾分析 65 例西藏高原肺结核的影像特点,总结分析其征象及价值。结果 原发性肺结核 3 例(5%),影像表现边缘清楚、密度均匀的致密影,伴有淋巴结增大、浸润型结核 31 例(48%),影像表现成分混杂的致密影,可见钙化及卫星灶、血行播散型结核 27 例(42%),影像表现两肺弥漫分布的结节影、纤维空洞肺结核 4 例(5%),影像表现空洞、纤维化、支气管播散三大特征。结论 高原地区肺结核以浸润型和血行播散型为主,有特定的影像特点,可以用来进行诊断。

关键词 肺结核 影像表现 高原

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The Retrospective Analysis of 65 Cases of Pulmonary Tuberculosis in Tibet Highland

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ABSTRACT Objective: To investigate the characteristics of medical imaging for the early diagnosis of pulmonary tuberculosis in highland. **Methods:** We retrospectively analyzed the features of medical imaging of 65 cases with pulmonary tuberculosis in Tibetan Plateau. **Results:** 3 cases (5%) were primary pulmonary tuberculosis. Pathological changes with clear margin and even density were found. Intumescent lymph nodes was concurrence. 31cases (48%) were infiltrative pulmonary tuberculosis. The density of the pathological changes is miscellaneous. Calcification and satellite could be found. 27cases (42%) were hematogenous disseminated pulmonary tuberculosis. Pervasive nodule in the two lung could be found. 4cases (5%) were fiber and cavitary pulmonary tuberculosis. Fiber, cavity and dissemination by bronchus were the characteristics in medical imaging. **Conclusion:** Invasion type and hematogenous disseminated type are the dominating type of pulmonary tuberculosis in Tibetan Plateau, with specific imaging features, which can be used for diagnosis of pulmonary tuberculosis.

Key words: Pulmonary tuberculosis; Highland; Medical imaging

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结核病是由结核分支杆菌引起的慢性传染性疾病,可累及全身各个器官,其中尤以肺结核最为多见。目前世界范围内随着生活水平提高,结核病化疗的进步,结核病疫情逐渐好转^[1,2]。但西藏高原由于特定的地理环境以及农牧区人民较低的生活水平,肺结核发病率显著高于内地。本文收集了 2008 年 1 月-2010 年 1 月期间在我院住院治疗的高原肺结核患者 65 例的病例资料,对其影像表现进行了回顾分析。

1 临床资料

1.1 一般资料

2008 年 1 月-2010 年 1 月在西藏日喀则解放军第八医院住院治疗的高原肺结核病例,共计 65 例。发病年龄与性别:男 38 例,女 27 例,年龄最大者 76 岁,最小者为 7 岁,老年及小孩患者居多。

1.2 临床症状

主要表现为咳嗽、咯血和痰中带血,有时有气急、低热、盗汗,食欲减退、体重减轻。咳嗽呈干咳有时伴少量粘液痰,病情进展时咳嗽加重,痰量增多,有空洞者痰多呈脓性,有的可突然咯血。发热为午后低热($<38^{\circ}\text{C}$),如肺部病灶急剧播散时可出现高热、寒战、呼吸困难。老年肺结核患者的表现可类似慢性支气管炎,咳嗽、咯痰,而发热和盗汗不明显。某些病人无明显症状,或“感冒”症状持续不好。

1.3 诊断标准

经手术、穿刺活检、纤维支气管镜证实或两次痰标本涂片镜检抗酸杆菌阳性或分离培养分支杆菌阳性,且抗痨治疗有效。

2 影像表现分析

2.1 原发性肺结核

3 例,占 5%。主要影像表现:侵犯一个段或叶,以下叶为多见(2 例),边缘清楚、密度均匀。可累及同侧或对侧的纵隔淋巴

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结,以气管右侧淋巴结为多见(2例)。

2.2 浸润型肺结核

31例,占48%。主要表现:见于上叶的尖、后段及下叶背段,呈大片致密性实变片絮影和纤维结节影(38例),边缘模糊,有时可见钙化(21例),形成新老病变共存。有时呈圆形、椭圆形阴影,大小0.5cm~5cm不等,边缘清晰,轮廓光滑,内部见斑点状、层状或环状钙化(5例)。有时周围可见散在的纤维增殖、渗出性病灶,即“卫星灶”(8例)。

2.3 血行播散型肺结核

27例,占42%。主要表现:两肺见弥漫分布的结节影,直径1~3mm,可融合成局灶性或弥漫性实变。结节的边缘清楚,密度均匀,在肺内随机分布,但多与小叶间隔、血管支气管鞘、小叶中轴间质、胸膜下间质有关,而与支气管无关。

2.4 慢性纤维空洞型肺结核

4例,占5%。主要表现:胸廓变形,病侧胸廓下陷,肋间隙变窄,气管向患侧移位。肺内表现空洞、纤维化、支气管播散三大特征。空洞壁可薄可厚,内壁可光滑可不规则,有时见气液平面(1例)。结核空洞干酪样物质经引流支气管排出,引起同侧或对侧的支气管播散,表现为沿支气管分布的斑片状阴影,或相互融合成小叶阴影(1例)。

3 讨论

肺结核是由结核杆菌引起的慢性传染病,从临床上大致可分四种类型:原发型肺结核、血行播散型肺结核、浸润型肺结核和空洞型肺结核^[3-5]。原发型肺结核是指初次感染结核杆菌引起的疾病。我国有80~90%是通过呼吸道感染肺部的。原发型肺结核常无明显体征,有的伴有轻度全身症状如倦怠、低热、食欲减退等,如能及时彻底治疗,一般预后良好。血行播散型肺结核是由于结核杆菌的血液散播引起的,病情严重。浸润型肺结核一般认为是原发结核的发展,多见于受过结核感染的成年人。慢性纤维空洞型肺结核是由于诊断延误,治疗不彻底的慢性肺结核。

在平原地区最常见的肺结核类型为浸润型,约占到80%。浸润型肺结核主要表现为肺部渗出、浸润及不同程度的干酪样病变,多数发病缓慢,早期无明显症状,后渐出现发热、咳嗽、盗汗、胸痛、消瘦、咳痰及咯血。X线检查,出现大小不等、边缘模糊的云絮状阴影^[6,7]。本研究发现,在西藏高原最常见的肺结核类型除浸润型外还有血行播散型,占到42%。血行播散型肺结核是肺结核中最严重的类型,早期诊断和及时治疗关系到病人预后。急性血行播散型肺结核为大量结核菌同时或在极短时间内相继进入血流所引起,因此血行播散型肺结核不过是全身粟粒性结核病在肺部的表现。结核杆菌主要是胸腔内淋巴结或初染灶干酪样病变破溃侵入血管,大量结核杆菌借血循环可达到全身主要脏器如肺、脑、脑膜、肝、脾、肾、肠等引起粟粒样结节病变。约有2%~6%的原发性肺结核可通过淋巴或血源性播散发生粟粒性肺结核,主要在机体抵抗力下降的继发性肺结核患者中发生,尤多见于小儿、老年人及免疫功能低下者。在内地这种类型比较少见,在西藏高原则属于主要类型,这可能是由于高原严酷的生存环境,以及农牧民较低的生活水平,导致整体人群免疫力较低。本型临床表现多不典型,特别在早期常常仅表

现为发热,仅少数出现呼吸道症状^[8]。X线胸片检查双肺不均匀浸润、毛玻璃样改变,双肺纹理增粗,或早期无明显改变,CT检查双肺弥漫性粟粒状结节影,结节的边缘清楚,密度均匀,在肺内分布多与小叶间隔、血管支气管鞘、有关,而与支气管无关^[9-12]。较平片而言,CT有更大的优势,特别是近年来由于高分辨率CT(HRCT)的广泛应用,肺结核的检出率较普通CT扫描有进一步提高^[14,15]。CT可发现更多的空洞和渗出性病灶,并且能判断病变有无活动性,还可发现支气管源性播散病灶以及肺门或纵隔淋巴结肿大;可以显示胸片隐蔽部位的病灶;CT还可在胸片诊断为胸膜肥厚者中鉴别单纯的胸膜肥厚和慢性包裹性积液^[13]。

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(下转第3712页)

可行性的提供了分子标志的早期诊断和治疗恶性骨肉瘤的生物学治疗的新靶点。并进一步为认识骨肉瘤发生发展的分子机制提供理论基础。由于本文仅研究了 stathmin 表达水平与骨肉瘤临床病理特征之间的关系, 没有相关预后资料, 所以 stathmin 表达水平与骨肉瘤患者的预后关系有待进一步研究。

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