

# 气管支气管脂肪瘤的诊断与治疗进展

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**【摘要】**气管支气管脂肪瘤是源于黏膜下脂肪组织的罕见良性肿瘤。其生长缓慢，咳嗽、气促等症状易误诊为哮喘，常致诊治延迟。高分辨率CT可根据脂肪密度初步诊断，支气管镜活检为金标准。治疗首选支气管镜切除，宽基底或巨大者需外科手术。彻底切除后预后良好，罕见复发。提高认识对改善预后至关重要。

**【关键词】**气管支气管脂肪瘤；良性肿瘤；支气管镜；CT

Diagnosis and treatment progress of tracheobronchial lipoma

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[Abstract] Tracheal bronchial lipoma is a rare benign tumor originating from submucosal adipose tissue. Its slow growth, coughing, shortness of breath and other symptoms are easily misdiagnosed as asthma, often leading to delayed diagnosis and treatment. High resolution CT can make a preliminary diagnosis based on fat density, and bronchoscopy biopsy is the gold standard. The preferred treatment is bronchoscopy resection, while surgery is required for cases with wide or large bases. The prognosis is good after complete resection, with rare recurrence. Raising awareness is crucial for improving prognosis.

[Key words] tracheobronchial lipoma; Benign tumor; Bronchoscopy; CT

## 介绍

在气管支气管肿瘤中，良性肿瘤仅占10%–20%<sup>[1]</sup>，而气管支气管脂肪瘤（tracheal and bronchial lipoma）更为罕见，约占0.1%–0.5%<sup>[2]</sup>。它起源于黏膜下组织，其咳嗽、气促等症状易误诊为哮喘或慢阻肺<sup>[3–4]</sup>，常导致诊断延迟及气道梗阻风险<sup>[5–6]</sup>。所以提高对本疾病的认识至关重要。

## 1 病理学和发病机制

气管支气管脂肪瘤好发于气管下三分之一段，与该区域黏膜下腺体及脂肪组织丰富有关<sup>[7]</sup>。组织学上，它起源于黏膜下层的脂肪组织，属真正的良性间叶性肿瘤<sup>[8]</sup>。其发生可能与局部脂肪代谢异常、慢性刺激（如吸烟）及遗传因素相关，但具体机制尚不明确<sup>[9–10]</sup>。病理学上，肿瘤大体呈表面光滑、有包膜的息肉样肿物，切面呈特征性淡黄色。镜下见

大量分化成熟的脂肪细胞，细胞核小而规则，无异型性<sup>[6]</sup>。此镜下表现是确诊的病理学金标准。

## 2 临床特征

气管支气管脂肪瘤的临床表现因肿瘤大小、部位及阻塞程度而异，起病隐匿<sup>[11]</sup>。早期常无症状。典型表现为持续性干咳、活动后气促及特征性体位性呼吸困难<sup>[12–13]</sup>。进展期可出现喘鸣（易误诊为哮喘）、咯血、反复肺炎，甚至缺氧<sup>[14]</sup>。该病诊断常延迟2–5年，体征多无特异性。

## 3 诊断

胸部X线平片敏感性低，多无异常发现，或仅见阻塞性肺炎等间接征象，不能作为排除依据<sup>[15]</sup>。高分辨率CT是首选无创方法，可清晰显示边界规整的腔内肿块，其均匀的

脂肪密度是诊断关键<sup>[16]</sup>。HRCT能清晰显示边界清晰、形态规整的腔内肿块,其特征性的均匀脂肪密度(CT值-40至-120 HU)是与错构瘤、类癌等软组织肿瘤鉴别的关键依据<sup>[14, 17]</sup>;三维重建技术可立体评估肿瘤与管腔关系<sup>[18]</sup>。支气管镜检查为术前病理金标准,镜下见表面光滑、淡黄色质软肿物,结合超声支气管镜可明确肿瘤起源层次及浸润深度,为治疗提供关键信息<sup>[19-21]</sup>。

#### 4 治疗与预后

对于诊断明确的气管支气管脂肪瘤,治疗核心在于彻底切除肿瘤、解除气道梗阻并保留正常功能。支气管镜下微创介入是首选方案,尤其适用于带蒂或基底较窄的肿瘤。常用技术包括高频电圈套器切除、激光、氩等离子体凝固(APC)

及冷冻切除等,具有创伤小、恢复快的优点<sup>[22]</sup>。对于瘤体巨大、宽基底、内镜治疗后复发或疑有恶变者,则需行外科手术,可实现肿瘤完整切除。该病预后极佳,彻底切除后复发极为罕见。术后需通过支气管镜定期随访,评估气道通畅度与有无瘢痕狭窄,确保远期疗效。

#### 5 结论

气管支气管脂肪瘤是罕见良性肿瘤,易误诊。高分辨率CT根据特征性脂肪密度可初步诊断,支气管镜活检为金标准。治疗需个体化,带蒂或窄基底肿瘤行支气管镜下切除,宽基底或巨大者则需外科手术。该病预后良好,提高认知与精准诊疗对改善患者结局至关重要。

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