



## Occurrence and relevance of filamentous fungi in respiratory secretions of patients with cystic fibrosis — a review

Submitted by Emmanuel Lemoine on Thu, 10/16/2014 - 14:05

Titre	Occurrence and relevance of filamentous fungi in respiratory secretions of patients with cystic fibrosis — a review
Type de publication	Article de revue
Auteur	Pihet, Marc [1], Carrère, Jacqueline [2], Cimon, Bernard [3], Chabasse, Dominique [4], Delhaès, Laurence [5], Symoens, Françoise [6], Bouchara, Jean-Philippe [7]
Editeur	Oxford University Press
Type	Article scientifique dans une revue à comité de lecture
Année	2009
Langue	Anglais
Date	2009/01/06
Numéro	4
Pagination	387 - 397
Volume	47
Titre de la revue	Medical Mycology
ISSN	1460-2709
Mots-clés	airway colonization [8], <i>Aspergillus fumigatus</i> [9], Cystic fibrosis [10], filamentous fungi [11], respiratory infections [12], <i>Scedosporium apiospermum</i> [13]
Résumé en anglais	<p>The colonization of airways by filamentous fungi and the development of respiratory infections require some predisposing factors as encountered in patients with cystic fibrosis (CF). Indeed, the defective mucociliary clearance which characterizes the disease is associated with local immunological disorders. In addition, the prolonged therapy with antibiotics and the use of corticosteroid treatments also facilitate fungal growth. An important fungal biota has been described in respiratory secretions of patients suffering from CF. <i>Aspergillus fumigatus</i>, <i>Scedosporium apiospermum</i> and <i>Aspergillus terreus</i> for filamentous fungi and <i>Candida albicans</i> for yeasts are the main fungal species associated with CF. Although less common, several fungal species including <i>Aspergillus flavus</i> and <i>Aspergillus nidulans</i> may be isolated transiently from CF respiratory secretions, while others such as <i>Exophiala dermatitidis</i> and <i>Scedosporium prolificans</i> may chronically colonize the airways. Moreover, some of them like <i>Penicillium emersonii</i> and <i>Acrophialophora fusispora</i> are encountered in humans almost exclusively in the context of CF. As fungal complications in CF patients are essentially caused by filamentous fungi the present review will not include works related to yeasts. In CF patients, fungi may sometimes be responsible for deterioration of lung function, as occurs in allergic bronchopulmonary aspergillosis (ABPA) which is the most common fungal disease in this context. Additionally, although the clinical relevance of the fungal airway colonization is still a matter of debate, filamentous fungi may contribute to the local inflammatory response, and therefore to the progressive deterioration of the lung function.</p>

URL de la notice	<a href="http://okina.univ-angers.fr/publications/ua4955">http://okina.univ-angers.fr/publications/ua4955</a> [14]
DOI	10.1080/13693780802609604 [15]
Lien vers le document	<a href="http://dx.doi.org/10.1080/13693780802609604">http://dx.doi.org/10.1080/13693780802609604</a> [15]

---

### **Liens**

- [1] <http://okina.univ-angers.fr/marc.pihet/publications>
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=7835](http://okina.univ-angers.fr/publications?f[author]=7835)
- [3] [http://okina.univ-angers.fr/publications?f\[author\]=8258](http://okina.univ-angers.fr/publications?f[author]=8258)
- [4] <http://okina.univ-angers.fr/d.cha/publications>
- [5] [http://okina.univ-angers.fr/publications?f\[author\]=7834](http://okina.univ-angers.fr/publications?f[author]=7834)
- [6] [http://okina.univ-angers.fr/publications?f\[author\]=7987](http://okina.univ-angers.fr/publications?f[author]=7987)
- [7] <http://okina.univ-angers.fr/j.bouchara/publications>
- [8] [http://okina.univ-angers.fr/publications?f\[keyword\]=9388](http://okina.univ-angers.fr/publications?f[keyword]=9388)
- [9] [http://okina.univ-angers.fr/publications?f\[keyword\]=9389](http://okina.univ-angers.fr/publications?f[keyword]=9389)
- [10] [http://okina.univ-angers.fr/publications?f\[keyword\]=6101](http://okina.univ-angers.fr/publications?f[keyword]=6101)
- [11] [http://okina.univ-angers.fr/publications?f\[keyword\]=9390](http://okina.univ-angers.fr/publications?f[keyword]=9390)
- [12] [http://okina.univ-angers.fr/publications?f\[keyword\]=9391](http://okina.univ-angers.fr/publications?f[keyword]=9391)
- [13] [http://okina.univ-angers.fr/publications?f\[keyword\]=9238](http://okina.univ-angers.fr/publications?f[keyword]=9238)
- [14] <http://okina.univ-angers.fr/publications/ua4955>
- [15] <http://dx.doi.org/10.1080/13693780802609604>

Publié sur *Okina* (<http://okina.univ-angers.fr>)