

Allergic bronchopulmonary aspergillosis

Allergic bronchopulmonary aspergillosis (ABPA) is a disease that develops with **hypersensitivity** to aspergillus antigens. Mainly *A. fumigatus*. It usually occurs in people with **asthma**, **cystic fibrosis**. It is also higher in people with **atopy**.

Clinical manifestations

In ABPA, the lungs show reversible **obstructive changes**, which, however, may progress to irreversible changes at more advanced stages. **Restrictive lung disease** with reduced diffusion capacity due to mucus and hyphal compression of the airways and **central bronchiectasis** (CB) develops.

ABPA is divided into five stages:

- **acute** - initial phase characterized by **asthma**, elevated IgE levels, **eosinophilia**, pulmonary **infiltrates** and **IgG** and **IgE** antibodies against *A. fumigatus*;
- **remission phase** - symptoms weakened (reduced);
- **exacerbation** - rediscovery of initial symptoms, IgE level **doubles**;
- phase occurring in patients with **asthma** dependent on regular use of **corticosteroids** - asthma worsens, causing **bronchiectasis**,
- **fibrotic phase** - development of **fibrosis** in the upper lobes of the lungs.



Lung preparation with aspergillosis.

Symptoms

Patients exhibit **episodic wheezing**, **coughing up sputum** with brown **coatings**, **chest pain** and **fever**.

Diagnostics

Diagnostic criteria for ABPA are **asthma**, immediate **skin reaction** to Aspergillus, presence of **IgG** and **IgE** against *A. fumigatus* in the blood, IgE level higher than **1000 IU / ml**, occurrence of **pulmonary infiltrates** on CT chest, **eosinophilia** (1000 cells / μ l).

Treatment

Most cases require treatment with systemic corticosteroids. **Corticosteroids** (suppression of hypersensitivity and inflammatory responses). The drug of choice is mainly **Prednisone**. In some cases, **Itraconazole** is also used.

References

Related articles

- Aspergillosis
- Invasive aspergillosis
- CNPA
- Aspergilloma
- Invasive fungal infections
- Aspergillus infections

External links

- Allergic bronchopulmonary aspergillosis (<https://login.medscape.com/login/sso/getlogin?urlCache=aHR0cHM6Ly93d3cubWVkc2NhcGUuY29tL3ZpZXdhcnRyY2xILzU3MTIxOQ==&ac=401>)

Literature

- KOUSHA, M, R TADI a A.O SOUBANI. Pulmonary aspergillosis: a clinical review. *European Respiratory review* [online]. 2011, roč. 2011, vol. 20, no. 121, s. 156-162, dostupné také z <www.ersjournals.com>. ISSN 1600-0617. DOI: 10.1183/09059180.00001011.
- WILLEY, Joanne M, Linda M SHERWOOD a Christopher J WOOLVERTON, et al. *Prescott, Harley, and Klein's Microbiology*. 7. vydání. New York : McGraw-Hill Hogher Education, 2008. 0 s. ISBN 978-0-07-299291-5.
- EDITOR, Moselio, Moselio Schaechter; consulting SCHAECHTER a Joshua LEDERBERG. *The desk encyclopedia of microbiology*. - vydání. Amsterdam : Elsevier, 2004. ISBN 0-12-621361-5.
- KOUSHA, M, R TADI a A.O SOUBANI. Pulmonary aspergillosis: a clinical review. *European Respiratory review* [online]. 2011, roč. 2011, vol. 20, no. 121, s. 156-162, dostupné také z <www.ersjournals.com>. ISSN 1600-0617. DOI: 10.1183/09059180.00001011.

