

عنوان مقاله:

Evaluation of the sensitization of asthmatic patients to *A.alternata*, *P.citrinum* and *A.fumigatus* by IgE-immunoblotting

محل انتشار:

مجله دانشگاه علوم پزشکی کرمان، دوره 26، شماره 3 (سال: 1398)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Azar Sabokbar - Associate Professor, Department of Microbiology, Karaj Branch, Islamic Azad University, Karaj, Iran

Mojgan Saghzadeh - Ph.D of Microbiology, Department of Mycology, College of Basic Sciences, Qom Branch, Islamic Azad University, Qom, Iran

Mohammad Hadi Fakoor - Assistant Professor, Department of Microbiology, Hidas Branch, Islamic Azad University, Hidas, Iran

Somayeh Talebi - Ph.D of Microbiology, Department of Microbiology, Faculty of Advanced Science and Technology, Tehran Medical Sciences, Islamic Azad University, Tehran, Iran

خلاصه مقاله:

**Background:** There is evidence to demonstrate an association between fungal sensitization and asthma. Several studies have shown that saprophytic fungi such as *Alternaria*, *Penicillium* and *Aspergillus* species are the most prevalent fungal allergens worldwide. The main purpose of this study was to compare *Alternaria alternata*, *Penicillium citrinum* and *Aspergillus fumigatus* allergen bands by using the same patients and controls' sera in clinical investigations. **Methods:** Forty-eight patients with asthma (۲۳ males, ۲۵ females) and Forty-eight healthy controls (۲۳ males, ۲۵ females) were collected in ۲۰۱۷. Glass beads and liquid nitrogen were used to disrupt the cell wall of cultured fungi. SDS-PAGE was used to isolate protein fractions. IgE immunoblotting against the patients and controls sera were performed to isolate protein bands after electrotransferring into the nitrocellulose membrane. **Results:** Our findings demonstrated the most allergenic bands consist to *A. alternata* with ۱۷ bands (۴۴.۷%) relative to *P. citrinum* and *A. fumigatus*, and we found that asthmatic patients in the age range of ۴۱ to ۷۰ years were more sensitive when compared to other age groups. **Conclusion:** Our results showed that *A. alternata* had more power in sensitizing the patients in comparison with *P. citrinum* and *A. fumigatus*. Also, the protein bands with high molecular weight can be considered as an index of sensitizing in immunoblotting assay.

کلمات کلیدی:

Asthma, Asthmatic patients, IgE-immunoblotting

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1583091>

