各種検査試薬を用いた室内ダニアレルゲン量の測定と測定値の比較

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The measurement of house dust mite allergen by several tools for determination and the comparison of their value

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要旨

32カ所の家庭等の掃除機ゴミから得たハウスダスト試料について、2社のダニアレルゲン用サンドウィッチELISA検査試薬と2社の簡易キットでダニアレルゲン量を同時に測定し、測定値の相違、相関性、簡便法の性能を検討した。その結果、細塵1gあたりのアレルゲン量(In試薬)はDer f 1が120~190,000ng、Der p 1が0~15,600ng、Der 1が120~192,400ng、Der 2が2~1,880ngの範囲であった。市販のELISA用検査試薬については、Der 1では2社の製品による測定値の差が大きく、Der 2では測定値が2社とも低く、試薬の作製や操作面でさらなる改善向上が望まれた。簡易キットについては、ELISA検査試薬との相関性は高く、汚染指標としての有効性が確認された。

Abstract

We measured the levels of mite allergens in 32 house dust samples with 2 kinds of tools for ELISA reagents and 2 kinds of tools for quick determining kits at the same time and examined the difference in the measurement value, relationship between the obtained data, the performance of the quick determining kits. Allergen levels measured by In tool were 120~190,000ng per g of fine-dust at Der f 1, 0~15,600ng at Der p 1, 120~192,400ng at Der 1, and 2~1,880ng at Der 2, respectively. As for ELISA reagents, the difference between two methods was large in the allergen amount of Der 1, and the allergen amount of Der 2 was low in both methods, so it is necessary to increase the detection performance of the tools. Moreover, as for the quick determining kits, the relationship of the data between the kits and the ELISA reagents was high, and the usefulness of the kits was confirmed as a mite pollution index in the room.

Key words: ダニアレルゲン(house dust mite allergen), アレルゲン検査試薬(tool for determining allergen), ELISA, 簡易キット(quick determining kit), ダニ汚染指標 (mite pollution index)