Diagnostic value of Dsg1 ELISA for pemphigus foliaceus: an appraisal

V Wiwanitkit

Citation

V Wiwanitkit. *Diagnostic value of Dsg1 ELISA for pemphigus foliaceus: an appraisal*. The Internet Journal of Dermatology. 2008 Volume 7 Number 2.

Abstract

Sir,

Pemphigus foliaceus, a dermatological immune disorder, usually presents with cutaneous blistering. Of the several diagnostic tools, enzyme-linked immunosorbent assay (ELISA) against desmoglein (Dsg) 1 is widely used. The diagnostic value of Dsg1 ELISA test was previously studied by others and gave differences in diagnostic power. In addition, most reports focused on small sample sizes. Therefore, a systematic meta-analysis was conducted to assess the diagnostic property of this test. In this paper, the author summarized the diagnostic value of Dsg1 ELISA for pemphigus foliaceus. In the literature, there are 4 published papers [1 – 4] on 232 cases and 446 controls (Table 1). The overall sensitivity and specificity are equal to 95.3 and 96.4 respectively. This supports the diagnostic usefulness of Dsg1 ELISA for diagnosing pemphigus foliaceus.

Figure 1

Table 1. Reports on diagnostic value of Dsg1 ELISA for pemphigus folliculus

es contr	ols	
_		
0 114	100	91.4
2 77	100	98
1 179	89.6	99.4
9 76	96	96
	2 77 1 179	2 77 100 1 179 89.6

References

- 1. Huang CH, Chen CC, Wang CJ, Chang YT, Liu HN. Using desmoglein 1 and 3 enzyme-linked immunosorbent assay as an adjunct diagnostic tool for pemphigus. J Chin Med Assoc. 2007 Feb;70(2):65-70.
- 2. Harman KE, Gratian MJ, Seed PT, Bhogal BS, Challacombe SJ, Black MM Diagnosis of pemphigus by ELISA: a critical evaluation of two ELISAs for the detection of antibodies to the major pemphigus antigens, desmoglein 1 and 3. Clin Exp Dermatol. 2000 May;25(3):236-40.
- 3. Amagai M, Tsunoda K, Zillikens D, Nagai T, Nishikawa T. The clinical phenotype of pemphigus is defined by the anti-desmoglein autoantibody profile. J Am Acad Dermatol. 1999 Feb:40(2 Pt 1):167-70.
- 4. Ishii K, Amagai M, Ohata Y, Shimizu H, Hashimoto T, Ohya K, Nishikawa T Development of pemphigus vulgaris in a patient with pemphigus foliaceus: antidesmoglein antibody profile shift confirmed by enzyme-linked immunosorbent assay. J Am Acad Dermatol. 2000 May;42(5 Pt 2):859-61.

Author Information

Viroj Wiwanitkit

Wiwanitkit House, Bangkhae, Bangkok Thailand 10160