

# Chapter 11

## Research Objectives

### The Main Objective

Determination of the relationship between the levels of anti-desmoglein 1 and 3 autoantibodies, measured by enzyme-linked immunosorbent assay (ELISA) in the new cases of pemphigus vulgaris, with the timeline of the disease activity among the patients hospitalized in Razi Hospital, Tehran, Iran, during 2013–2014.

### Minor Objectives

- Determination of the severity of pemphigus vulgaris by Pemphigus Disease Area Index (PDAI) in new cases of this disease
- Measurement of the levels of anti-desmoglein 1 and 3 autoantibodies by ELISA in the new cases of pemphigus vulgaris
- Determination of the time required for the management of disease activity of new cases of pemphigus vulgaris under treatment
- Examination of the relationship between the levels of anti-desmoglein 1 and 3 autoantibodies, measured by ELISA in the new cases of pemphigus vulgaris, and the severity of cutaneous and mucosal involvement
- Investigation of the relationship between the severity of new pemphigus vulgaris cases, measured by PDAI, and the control time of disease activity
- Comparing the extent of association between the levels of anti-desmoglein 1 and 3 autoantibodies measured by ELISA in the new cases of pemphigus vulgaris and the control time of the disease activity
- Determining the relationship between the severity of disease in new cases of pemphigus vulgaris measured by PDAI and the control time of activity

## **Practical Objectives of the Project**

- Determining the prognostic role of the level of circulating anti-desmoglein 1 and 3 autoantibodies measured by ELISA method in controlling the activity of the disease
- Identification of pemphigus vulgaris subgroups that need a longer period of hospitalization and higher dosages of prednisolone for disease control

## **Questions and Hypotheses of the Research**

1. The level of anti-desmoglein 3 autoantibodies in new cases of pemphigus vulgaris has association with the time needed for controlling the activity for mucosal forms of disease.
2. The level of anti-desmoglein 1 autoantibodies in new cases of pemphigus vulgaris has association with the time needed for controlling the activity of cutaneous form of disease.
3. The level of anti-desmoglein 1 and 3 autoantibodies at the onset of disease is associated with the severity of cutaneous and mucosal involvement.
4. The severity of cutaneous and mucosal involvement in new cases of pemphigus vulgaris is related to the time needed for controlling cutaneous and mucosal disease.
5. Does the relationship between the times needed for controlling the disease have a stronger relation with the levels of desmoglein autoantibodies or the severity of the disease?
6. The level of anti-desmoglein 1 autoantibodies in new cases of pemphigus vulgaris is associated with the severity of the cutaneous form of disease.
7. The level of anti-desmoglein 3 autoantibodies in new cases of pemphigus vulgaris is associated with the severity of the mucosal form of disease.