Abstract:

**Objective:** To observe the serum levels of β-defensin in the patients suffering from acquired immune deficiency syndrome (also known as Acquired Immune Deficiency Syndrome, AIDS) and the healthy people, and perform further analysis.

**Methods:** Totally 150 cases of HIV patients from He’nan Contagious Disease Hospital were grouped into a HIV positive (HIV +) group, and 30 cases of healthy volunteers were grouped into a HIV-negative control groups. Subsequently, they were subjected to questionnaire and oral examination, and their blood samples were collected. Enzyme-linked immunosorbent assay (ELISA) was performed to determine the serum levels of β-defensin 1, β-defensin 2 and β-defensin 3. Statistical analysis: SPSS13.0, Kruskal-Wallis test and Mann-Whitney test.

**Results:** The levels of β-defensin 1 in the patents are significantly higher than those of the control groups (P <0.05), and the levels of β-defensin 2 in the patents are significantly decreased compared to control groups (P <0.05).

**Conclusion:** β-defensin 1 and β-defensin 2 can be involved in anti-HIV virus immune defense response in AIDS patients.

**Keywords:** ADIS, β-defensin, ELSA