

Autoantibodies to different types of collagen may be the probable reason of chronic inflammation in type 2 diabetic foot patients.

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The aim of this study was to evaluate the level of serum antibodies (AB) to type I and III collagen for revealing the local autoimmune response to vascular wall capillary bed and extracellular matrix in type 2 diabetic foot patients.

Materials and Methods: 31 type 2 diabetic patients took part in this study: group 1 (G1)- 16 patients with diabetic-foot-syndrome (DFS) and group 2 (G 2) -15 patients without DFS, 11 men and 20 women, mean age was $54.6 \pm 2, 1$ years, mean HbA1C $9.7 \pm 1.3\%$, duration of diabetes was 9.4 ± 2.0 years, the duration of ulcers presence was 8.4 ± 1.1 months. AB to type I and III collagen were determined in serum immunoferment standard method. **Results:** In the G1 the level of AB to type I and III collagen was 20 and 7 times higher respectively compared to G 2. The level of AB to type I collagen was strongly correlated with ulcer duration ($r=0.9$) and ulcer size ($r=0.6$). There was not any correlation with Wagner grade, level of HbA1c, age and other complications of diabetes. It was revealed the correlation between the level of AB to type III collagen and ulcer size ($r= 0.83$) and ulcer duration ($r= 0.74$) too. There was not any relationship between the level of AB and TcPo2. **Conclusion:** This results demonstrates the possible development of local autoimmune response of ulcers which may be on of the reasons of chronic ulcer inflammation in type 2 diabetic foot patients.