- We retrospectively analyzed the wound healing results and their relationship with the co-morbidities of 126 Wagner grade 3 to 5 diabetic foot lesions treated with hyperbaric oxygen therapy (HBOT) and monitored them for 12 months.
- There was no relationship between HBOT outcomes and age, gender, diabetes duration and type, hypertension, smoking habits, glycated hemoglobn, sedimentation, C-reactive protein and number of HBOT sessions; while history of coronary artery disease, stroke and non-proliferative or proliferative retinopathy worsened the outcomes ($P = 0.002$, $P = 0.015$, $P = 0.022$ respectively).
- HBOT outcomes were also compared to peripheral arterial disease (PAD)in 86 patients, which was determined by color Doppler ultrasonography and/or angiographies and analyzed with a modified scoring system.
- The single scorings of each artery from the aorta to the dorsal pedal artery and average scorings at the aorto-iliac, femoral, popliteal and pedal levels have demonstrated that, only the mean values of the femoral arteries affected the results ($P = 0.048$).
- In conclusion, histories of coronary heart disease or stroke and non-proliferative or proliferative retinopathy might be expected to limit the effect of HBOT and PAD at femoral level should first be considered for surgery, but PAD below the knee is not an obstacle to the efficacy of HBOT.