

# OXYGEN OZONE THERAPY IN DIALYSIS PATIENTS

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Larger indications for dialysis and the continued progress of the cleansing practices have resulted in an increased incidence of dialysis burdened with concomitant diseases such as peripheral ischemia of the lower limbs, diabetes mellitus and musculoskeletal disorders from beta2 microglobulin accumulation.

It is increasingly difficult to cure this comorbid disease, unstoppable and worsening, and therapy is often only symptomatic or demolishing. On the other hand the number of reports that show a beneficial effect of oxygen-ozone therapy (OO) in the treatment of these diseases is increasing.

Since there are no data on the effect of OO in dialysis subjects, despite some initial skepticism, we selected negatively 25 patients (12 F, 13 M) of average age 70 years (range 48-97) and dialysis average age 10 years (range 4-34). The patients had ischemic heart disease on the lower limb at III and stage IV (n = 10, including 5 with previous amputations) or serious musculoskeletal disorders (n = 15).

We associated to the pain relief therapy in place the OO, according to the protocols by SIOOT. Before and after the therapy we evaluated the performance of sleep, physical activity, the daily frequency of painful episodes, the intake of analgesics and pain perception according to a visual analogue scale (VAS).

From August 2002 to December 2003 we performed 461 treatments on 25 patients, with an average of 18 treatments for patient.

The results are shown in the table:

	Osteo-articular pathology	Peripheral ischaemia Stage III	Peripheral ischaemia stage IV
excellent	8	2	4
good	5	2	1
none	2	0	1
No. of patients	15	4	6

All patients had a significant reduction in the severity of pain (VAS from  $7.9 \pm 1.3$  to  $2.3 \pm 1.6$ ) and the frequency of painful episodes; in 64% of cases there was an increase in physical activity and in the 75% a recovery of the normal sleep-wake relationship. The data is further

enhanced by the suspension of any pain relief which occurred in 21/25 patients (84%). In the 10 ischemic patients we observed a complete recovered from trophic lesions. They have never registered side effects during the treatment.

The unexpected results achieved in the treatment of dialysis complications currently without a valid etiologic therapy suggest the need to work to optimize an extracorporeal circulation system that involves in the near future the administration of OO at every dialysis session in a selected patients population.