## ARAB HEALTH Dubai Wednesday, January 25, 2006 8.30 am – 12.30 pm

## Medical Ozone as Part of a Complementary Medical Concept. Indications and Pharmacological Effects.

## Ozone as Biomolecule

Apart from  $H_2O_2$ , OH- and superoxide radicals, it has also been possible to demonstrate the ozone molecule as being an endogenous, biologically "reactive oxygen compound" in the organism, apparently as a cellular response to infections and inflammatory processes (Science 2002-2004).

Indications and Pharmacological Effect

Scientific results on the activation of immunocompetent cells by "medical ozone" obtained over the last decade, on the regulation of the enzyme-based antioxidant system and angiogenesis now appear in an exciting new context (Bocci, Barakat 2004).

The classical candidate for a complementary medical treatment concept involving ozone is the "post-treatment patient with circulatory disorders", i.e. the diabetic with micro- and macroangiopathias; such patients are now able to profit from an activation of red blood cell (RBC) metabolism and the resultant improved oxygen availability - in addition to the increase in antioxidative capacity of the organism (León, Re et al. 2005).

On the basis of endogenous cytokine production and activation of the biological radical scavengers, this now confirms the favourable influence of combined medical ozone therapy on chronic forms of hepatitis - in one pilot study, almost 40 % of the 60 hepatitis C patients involved were found to be virus negative after 6 months (Mawsouf 2004).

And, last but not least, the improvement in the general wellbeing of cancer patients due to supportive therapy with ozone at low doses becomes understandable and scientifically founded when we view the established pharmacological active mechanisms of medical ozone in this context (Viebahn 2005).

As application forms of considered medical choice, both rectal ozone gas application (insufflation) as well as "major ozone autohaemotherapy" at low  $O_3$  doses have proven their value in the same way as the topical treatment of infected ulcerations.

More than 8,000 patients had been treated with ozone by intervertebral disc injections in the last 11 years in cases of Lumbar Disk Herniation; the minimally invasive ozone treatment opens a new strategy in pain therapy (Alexandre, Salgado 2003-2005).

**Speakers:** 

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- Dr. Renate Viebahn, "Medical Society of the Use of Ozone in Prevention and Therapy", Baden-Baden, Germany
- Dr. Ahmed Al Jaziri, Al Raschid Hospital Dubai, UAE
- Dr. Héctor Salgado, Sevilla Spain