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Lamberto Re
Gregorio Martínez Sánchez

EMERGING
THERAPIES
OZONE

¿WHAT THE PATIENT SHOULD KNOW
AND HOW THE DOCTOR MUST ACT?



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Emerging Therapies: Ozone
What patients have to know and what the doctor has to do?

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Preface

This book is the result of more than ten years of cooperation between two experts with different experiences in the field of medical knowledge. Professor Lamberto Re, a Medical Doctor with wide experience in many fields of clinical pharmacology and toxicology as well as in the electrophysiological techniques, and professor Gregorio Martínez Sánchez, an international expert of oxidative stress. They met each other in 1993 in Havana, Cuba, for scientific collaboration at the CEIEB (Research Centre for the Study of the Oxidative Stress). Since the first time there has been an agreement and a mutual respect based on specific knowledge and on the possibility to give to suffering people the most suitable and the less aggressive medical and therapeutic support. They shall also try to give to doctors the basic knowledge about natural therapies which are often ignored in regular graduation courses of medical schools.

If we dwell upon the concerned scientific subjects of the two scientists, that is to say Oxidative Stress and Molecular Pharmacology, we can foresee potentialities on the basis of some innovative therapies, among which the Ozone Therapy. Their experience and feeling of brotherly friendship together with the same way to think Medical Therapy, have encouraged them to suggest some essential advices that could be necessary for patients, in order to know *“how he will be treated and what they have to know about the treatment they’re doing”*, and for doctors that should have to know perfectly all that *“they doesn’t know yet”* about the therapy based on a mixture of oxygen-ozone.

The authors.

Introduction

In every century people have thought they understood the Universe at last, and in every century, they were proven to be wrong. It follows that the one thing we can say about our modern knowledge is that it is wrong. Isaac Asimov (1920-1992).

So we can say that “to understand the life” we need a “life”.

In the clinic where more than 15 years ago we started our clinical activity in the field of Natural Medicine we have a white book so that every patient could write comments, positive or negative, regarding the treatment based on Ozone and medicinal plants. If we give a look at that book, full of suggestions, poetries and touching sentences, we can dwell upon what we wrote right on the first page: *“There is no medical therapy that could be successful without love and respect for human suffering. People who suffer need to be loved, heard and finally taken care.”*

The importance of these words in the daily approach of the doctor that is going to treat his patients is one of the main guideline of this work.

“The doctor has to refrain from causing harm or hurt”, says a point of the Hippocratic Oath. This is a basic point because it

reminds us of the doctor's great power that, reversing the sentence, is able to harm or hurt if he doesn't act carefully or if he does not consider the patient as a man first of all. This book is mostly directed to those people who would undergo this therapy; maybe someone suggested by a patient who have derived benefit by this kind of therapy but that, owing to misleading comments, is sized by the doubt and the fear of something new. Some colleagues are often stuck to the first use and indication of Ozone therapy: the slipped disc. We cannot blame those who ignore that this indication to the treatment maybe cover less than 5% of the therapeutic potentialities of ozone. However we can fill the gap giving them the information that could be needed in order to expand the knowledge in this field that is still full of doubts despite the wider and wider scientific divulgation.

It often occurs to be invited to a conference at which we say all that ozone therapy can offer today and we're surprised by the opinion of both doctors and all the people attending the meeting that are fascinated knowing the mechanism and the potentiality of this therapy. But all this is not enough. The superficial opinion of some colleagues regarding a therapy based on a product that "never could be sold" and hard to study deeply for its rapid decomposition, make it difficult to be accepted. Moreover, the fact that both the media and the web report disturbing news about Ozone such as *the hole in the ozone layer* and *the alarm ozone* is becoming more confusing for people who need treatment and try to do this therapy, after the failure of many so-called orthodox therapies.

In this aim, we recall a thought of a famous physician who said it many years ago: *«all you can verify to the limits maximum and minimum is science»*. In a few words, what has always been and will always be does make sense. In one of the last lessons of Pharmacology course, we've asked our students to identify themselves in a time situation of many centuries ago, without going to prehistory. Then, if possible, we've asked them to turn on their computers. After a short research we can say that on the WEB it is said nothing about the Ozone hole and even about the Ozone alarm.

Why? There was a lack of information at that time or there is an ideological falsity today. Probably none of them.

The explanation is that before the industrial transformation there was only “good” Ozone. For “good” Ozone we mean the one that creates in nature maybe after a storm or the one that ascetics or hermits, which are used to pray outdoor maybe in a wood full of dew, could breath in the morning, after or during sunrise. Nature never causes damage but it rebels if man tramples on it. And nowadays there is also *bad Ozone* caused by terrifying machines that discharge toward the sky their chemical poison.

The Ozone layer that forms from the ultraviolet radiations, which bear on the atmosphere with the aim to stop them in order to protect us, is being chemically destroyed by a series of reactions caused by our harmful exhausts.

Moreover, the more and more numerous cars in our cities contribute to increase alarmingly the Ozone concentration at ground level. The concentration of this gas, which has oxidant properties, increases creating a danger for the population.

But after a short deliberation we wonder: What the poor Ozone has to do with this? We can say that it is a poison just if somebody explain us exactly what is a poison. Every substance with a biological activity can turn into poison. Even water? Yes, unfortunately in our collective imagination the “poison” is something harmful for the organism.

However we certainly can't comprise a such precious liquid like water in the category of poisons. Nevertheless we can die of water and we can recover thanks to curare!

Doing an interpretive combination between ohm's law and myocardium infarct may seem illogical but after a careful assessment it can be demonstrated how physics can integrate with medicine, like mathematics with physiology and nature with pharmacology.

Pharmacology can be called also science of poisons, both toxic and therapeutic not depending on the quality but on quantity.



All substances are poisonous, there is none that is not a poison; the right dose differentiates a poison from a remedy. Paracelsus (1493–1541).

The fact that human persists in extracting information from botanic species not to enhance their possible qualities but with the aim of plagiarize their composition creating similar molecules in laboratory makes us very sad.

In our opinion it would be wiser to start studies that allow us to understand better the composition of some plants and use our sophisticated research technologies in order to catch how they could follow their biological function. For example, this happened for some substances known from the antiquity for their therapeutic (digitalis) or toxic (curare) properties and properly considered as drugs.

The idea of extracting the active principle in order to obtain the most aimed effect ignoring other constituents that could guarantee a more harmonic effect on the organism is today clearly failed. The necessity of patenting and gaining from the richness of nature which offers itself to us, is an improper action and against nature itself.

It is not always easy to traduce in a certain book all the thoughts in our mind. Ideas and concepts, that seem to fascinate us when they are elaborated by our brain, suddenly disappear when we try to transfer them from our mind to the leaf.

We apologize if some passages can seem off topic or “*off the rules*” but this first book planned with the colleague and friend Gregorio is the result of the enthusiasm and encouragement received from patients and other colleagues. They spurred us to do this in the light of the experiences and interpretations, sometimes philosophical and metaphysical and always coherent to the most serious scientific custom. Therefore, the book has been written in order to make more understandable some notions at the basis of the medical research in a new and fascinating field which doesn’t want to be alternative but complementary to all that medicine try to realize in order to promote the physical and psychophysical well-being of man.

One of the thing that mostly stroke us in our career of researcher is the dichotomy which is always repeating in many biological functions and maybe is at the basis of our existence on the Earth. From *yin* to *yang* of the ancient Chinese culture, from paleo to neoencephalus, until the autonomic nervous system that control our visceral functions. Every attempt to lead to recovery has always to be less aggressive than the disease which afflict the patient.

We’ll try to explain how these aspects, after a long period of research, can be applied and reinterpreted when we have to cure the patient who’s asking for help, comprehension and love: a smile and a good word will always help, also in response to the most insurmountable hypothesis of disease.

We don’t want to give in to temptation of a certain dogmatism but the duty of limiting ourselves as men to a power and a knowledge that will always escape us, maintaining the humility and conviction that our limits are connected to a fleeting earthly experience, spurred us for a more “religious” interpretation of our actions in the medical and scientific field. Every day of life on Earth that God gives us is simply an additionally day to Love, to Dream and to Live. After thousands of years since his

education where pain is life, altruism is love, we look for more and more unnatural remedies in order to move away from pain and to offend life. If we dwell upon these considerations, the hope that also other people could. God is immense, all that he gave us can't be ignored just because we don't perceive its immediate material advantages.

Which biggest earthly adversity can be compared to the pain of who dies with serenity and cheerfulness as long as this help who mostly needs force and love? *If there is no pain, there is no love. If we love, we suffer for our friends, our neighbors, our sick child. This is love. Giving without asking. Who can, has to do it. Who can't, won't be blamed but helped on his research. Love gives love, incomprehension and arrogance don't stimulate the anger of who doesn't love, but the anger of who hadn't received love.*

Drug Therapy Back to its Origins: from Synthetic to Natural

True science teaches, above all, to doubt and to be ignorant.

Miguel de Unamuno (1884-1936).

Scientific interest in natural products and in erroneously-called *alternative* therapy has been spurred on both by a general reflection on synthetic medicines which are too often connected to non-marginal adverse effects, and by the reading of an article written by P. A. Cox and M. J. Balick of Harvard University and published in *Science* in August 1994.¹ Considering that the term “*alternative*”, in our opinion, should be definitively replaced by the term “*complementary*” or “*integrative*”, we can say that there is no remedy that could be alternative to another, but there are remedies that could effectively “*complement*” common medical therapies so as to give patients the best therapeutic effect.

The work of Cox and Balick has underlined the importance of research on botanic species endowed with therapeutic effects that are potentially interesting for human health but which are currently underestimated. It is known that pharmacological

therapy, even if in an empirical way, has ancient roots. Indeed, many active principles in use today at a clinical level belong to vegetal species proposed for medical use in the past. This occurred as a result of folk tradition being handed down through the generations by ancient peoples, providing epidemiologic data as proof of both toxic and therapeutic effects.



Papaver somniferum (opium)

1803 Friedrich Wilhelm Adam Sätürner discovers the *Morphine*

1826 *Morphine* becomes the first natural product in commerce

Generations of healers belonging to ethnic groups in specific geographic areas, with the ability to assess the beneficial or harmful effects of plants, roots or leaves, are an integral part of human history. This has allowed and continues to allow us to obtain medical remedies beginning from simple techniques such as extraction, boiling, etc. Digitalis, aspirin, reserpine and many other products originate from different botanic species and they are a real example of pharmacological active substances that are still in use.

Recent reassessment by pharmacologists of natural derivatives, which in medical history preceded modern therapy and the synthesis of more and more specific but extremely expensive and not completely harmless products, is now leading to a reconsideration of basic natural products.

This new tendency, also supported by prestigious research organizations such as the *National Cancer Institute* in USA, is