



Anti-Aging Therapeutics Volume VIII

Contents & Article Summaries

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1	<p>Anti-Aging Medicine: Present and Future Developments <i>Ronald Klatz, M.D., D.O.</i></p> <p>For the last 14 years, I have been talking about the future of healthcare, and the next generation of healthcare. Well not any more. We have state of the art healthcare right here and now. And this is not something that is just for far-forward pioneers. This is for practicing clinicians who want to be at the top of their field. We have now reached the cusp of immortality. We are on a cusp of technology, which will take us to life spans of 100 years of age and beyond. And perhaps very far beyond, because old age simply is not what it used to be. This paper will consider these technologies and future technologies.</p>	1
2	<p>Palladium Lipoic Complex: "Energy to Get the Job Done" <i>Frank Antonawich, Ph.D.**</i></p> <p>Cellular energy is synonymous with metabolic power. As we age, there is a decrease in metabolism; furthermore, numerous disease states involve metabolic dysfunction (i.e. ischemia/stroke, cancer). The major power plant of the cell is the mitochondria, which utilize high-energy intermediates (namely NADH and FADH) to donate electrons and drive the production of ATP, our functional energy source. The aim of this paper is to address the question: can we alter metabolic fitness by providing an alternative electron source?</p>	5
3	<p>Reward Deficiency Syndrome (RDS): Neurogenetic Aspects of Aging and Related Behavioral Disorders Specific to Dopaminergic Pathways <i>Kenneth Blum, Ph.D., Thomas J.K. Chen Ph.D., Seth H. Blum, B.A., David E. Comings M.D., Julie F. Mengucci, R.N., Brian Meshkin. B.Sc., Bernard W. Downs, BBA, Eric R. Braverman, M.D.</i></p> <p>The purpose of this report is to provide scientific validation related to the genetic aspects of Reward Deficiency Syndrome (RDS) and associated behavioral disorders. Our approach here is to outline the role of dopaminergic pathways in RDS related behaviors and to point out that aging may have certain negative consequences related to impaired functionality, and understanding these pathways may lead to important preventive and treatment targets. We will attempt to show the genetic elements that may effect expression of certain cognitive impairment based on neurotransmitter deficiencies as seen with individuals faced with RDS. This group may be at a higher risk for dementia in later life. This hypothesis may provide a paradigm shift in the prevention and treatment of aging, in particular brain function and resultant behavior. Our overall goal is to show that these dopaminergic genes may have impact on the biology of humans and could affect one's behavior from birth to death.</p>	9

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16	<p>Female Sexual Healing and Longevity <i>Nick Delgado, Ph.D., CHT***</i> A sign of the start of premature aging in women is sexual decline. A loss of sexual desire or arousal is a significant biomarker that must be treated to improve the quality of life. Feelings of love also contribute to the stimulation of hormones and neurotransmitters that contribute to longevity. This paper will introduce a four-step treatment plan that can help to restore longevity, love, intimacy, and quality of life.</p>	133
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28	<p>Neurono-Glial Mechanisms in Brain Protection, Aging Deceleration, and Neuro-Psycho-Longevity <i>Dan Riga, M.D.,Ph.D., Sorin Riga, M.D., Ph.D., Florin Halalau M.D., Ph.D., Francisc Schneider, M.D., Ph.D.</i></p> <p>Cerebral lipopigments (LPs) – lipofuscin and ceroid – represent a significant marker in postmitotic normal and pathological aging. Moreover, this biological garbage is connected with important causal and associate neuropathological damages, for example, the generation of unbalances of neuronal and glial homeostasis, and multiple subcellular impairments, with negative consequences from neuronal function to central nervous system physiology. Therefore, LP processing, lysis, and elimination is one of the main mechanisms for the re-establishment of metabolic, cellular, and tissue homeostasis, as well as in anti-aging and rejuvenation therapies. Long-term administration of neuroactive therapies that possess synergistic rejuvenation mechanisms, actions, and effects (anabolism regeneration, subcellular energetics improvement, and catabolism adjusting, with LP processing, dissolution, and elimination) represent new prospects in deceleration of normal and pathological cerebral aging, with subsequent increase of neuronal longevity. In addition, they represent alternative and complementary treatments in neuropsychogeriatrics.</p>	223
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34	<p>Optimal Thyroid Replacement <i>Neal Rouzier, M.D.***</i> Thyroid hormone is the one of the most important hormones in the body, however most of us ignore it, which is very unfortunate. We optimize all of our other hormones, and we optimize the vitamins and supplements that we take, so it only makes sense to optimize the hormone that effects metabolism, energy, and temperature. The aim of this paper is to discuss thyroid hypofunction and optimal thyroid replacement therapy.</p>	275
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36	<p>Hormonal Relationships to Diseases of Aging <i>Eugene Shippen, M.D.</i> *** This paper is concerned with testosterone deficiency and the role of testosterone in common degenerative and inflammatory diseases. Treatments that down-regulate testosterone will also be discussed.</p>	291
37	<p>Hormone Replacement Therapy (HRT) – The Answer <i>Pamela Smith, M.D., M.P.H.</i> *** The menopause hormone response is as unique to an individual as their fingerprint. Hormone replacement therapy (HRT) should not be done without a thorough understanding of all the hormones in the body. Hormones really are a symphony, and in a symphony everything needs to be playing in tune. If you have one hormone that is not playing in tune, then your patient will not have a good response. This paper will discuss the functions, symptoms of hormone deficiency, and symptoms of hormone excess, associated with: estrogen, progesterone, testosterone, DHEA, cortisol, insulin, pregnenolone, and thyroid hormone.</p>	301
38	<p>Clinical Applications & New Technology of Saliva Hormone Testing for Anti-Aging <i>Paul Ling Tai, D.P.M.</i> ** In the quest for hormone rejuvenating programs, one of the most important first steps is the vital evaluation of each individual's hormone status with hormone testing technology. It requires a direct testing and measurement of each of the essential sex hormones, which affect aging. Blood serum hormone testing is by far the most common technique practiced by most mainstream physicians in the United States. Careful analysis reveals that serum hormone testing has a number of complications that make it much more difficult to implement and use. Saliva hormone testing is a relatively new technology by comparison, however, by comparison, it is more limited in its acceptance and usage. Technological developments in saliva hormone testing, namely the Luminescence Immunoassay (LIA) and the Liposome Active Delivery System, mean that saliva hormone testing is more sensitive and accurate than ever before. This paper will discuss saliva hormone testing and its clinical applications.</p>	313
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40	<p>The Role of Sugar and Honey in Wound Healing <i>Julian Whitaker, M.D.</i> *** This paper is concerned with the use of sugar and honey to treat open wounds. The benefits of using sugar to treat open wounds, particularly diabetic wounds, will be discussed, as will the mechanism of action. A protocol for the use of sugar to treat diabetic wounds will be provided.</p>	341

ANTI-AGING CLINICAL PROTOCOLS, 2006-2007		
1	<p>Treatment of Photoaged Skin by Photodynamic Therapy <i>Martin Braun, M.D.*</i> Anti-aging physicians have an unprecedented variety of options for the treatment of the pigmentary changes, telangiectasias, fine wrinkles, rough skin texture and actinic keratoses (AKs) associated with photoaging. Pulsed light (PL) is available to eradicate brown spots (lentigines) or telangiectasias in a process known as photorejuvenation. If actinic keratosis (AK) lesions are also present, photodynamic therapy (PDT) with topical 5-aminolevulinic acid (ALA trade name Levulan® Kerastick®, Dusa Pharmaceuticals) with activation by PL not only removes AKs, but enhances the cosmetic outcome obtained with PL alone by improving skin texture. The overall process is called photodynamic photorejuvenation or photodynamic therapy (PDT).</p>	343
2	<p>Treatment Protocol for Quickly Evaluating Pain and Determining How to Treat It <i>Jacob Teitelbaum, M.D.***</i> Treatment recommendations for neuropathic pain; fibromyalgia and myofascial pain syndrome; arthritis; inflammatory pain; osteoporosis and bone pain/fractures; cancer pain; headaches; migraine headaches; back pain; indigestion; spastic colon; non-cardiac chest pain; pelvic pain; wrist, hand, shoulder, leg and foot pain.</p>	347

* Denotes speaker at Spring 2005 Session of the Annual International Congress on Anti-Aging Medicine;
 ** Denotes speaker at Summer 2005 Session;
 *** Denotes speaker at Winter 2005 Session.