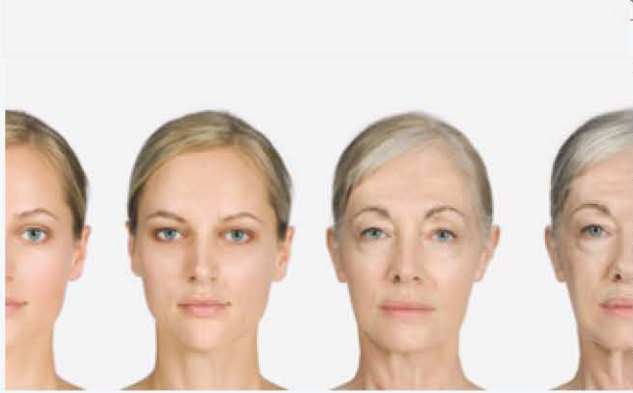


Aging is inevitable yet modifiable



In the current fast paced and stressful life, people are aging faster.

From “Young Adults”, they are becoming the “Old Young”. Working against the body clock has produced “SOCIAL JET LAG” among everyone, which by altering the body stress management (hormones) system has

compounded the problem and aging is happening much before actual age. The age of onset of the diseases like Diabetes, Hypertension, Heart attack , cancers, etc have gone down from 50’s to 20’s and 30’. Early aging is multifactorial , and I feel that, the four key components of early aging need to be dealt with utmost expertise at the root level:

Obesity, Hormonal Imbalances, Stress, Skin and Aesthetics

The age of Menopause and Andropause has gone down in last few decades. The phenomenon of subclinical hypothyroidism and subclinical Addison’s disease are very well understood now. Adult Onset Growth Hormone deficiency has emerged as an independent clinical entity. Altogether, the features of Hormonal Imbalances and Aging are so much in common that the role of hormonal imbalances bringing the aging prematurely cannot be ignored. The Hormones , Neurotransmitters, Inflammatory mediators and Antioxidants play important role as signalling mediators of Aging process. A state of inflammation , reduced levels of Testosterone and IGF-1, combined with loss of motor neurons have been linked to accelerated decline of muscle mass and strength in an aging individual.

Although aging does not simply result from a variety of hormone deficiency states, medical intervention in the processes of menopause, andropause, adrenopause, or somatopause may prevent or delay many aspects of the aging process. Since hormones, inflammatory markers, and antioxidants are integrated into complex signalling networks, levels of individual biomarkers may well reflect adaptation within homeostatic feedback loops rather than true causative factors. Thus, the therapeutic strategy of

single-molecule replacement may be ineffective or even counterproductive. The presence of such signalling networks and feedback loops may help explain why single-hormone “replacement therapy” for problems of aging has demonstrated little benefit. The focus of research in this area is now on multiple-hormonal dysregulation. For example, taken one at a time, levels of testosterone, dehydroepiandrosterone (DHEAs), and IGF-1 do not predict mortality, but in combination they are highly predictive of longevity.

As the medical fraternity is opening up to discuss aging as a clinical entity, the understanding of Endocrinology of aging and the impact of various hormones on aging process is mandatory. Hormones like Growth hormone, Testosterone, Estrogen, Thyroid, Cortisol, DHEA do play pivotal role in aging process and their better understanding and expertise in their manipulations is definitely an array of hope in Antiaging Medicine.

In the current era of Obesity Epidemic, the whole world is looking for the Obesity management solutions from Life style modification, Dietetics to Medical Management and Surgical Interventions.

The journey of the medical management of Obesity has travelled from appetite suppressants like Subutramine , Phenteramine, Amphetamines to Lipase inhibitors like Orlistat. Currently anti epileptic like Topiramate has found its place in the Obesity management. Bariatric Surgery though in its evolving phase is also an array of hope in grossly obese individuals.

With lots of trial and errors along with randomized control studies or Observational studies or Comparative studies, medical fraternity keeps highly vigilant towards finding the solution of this epidemic. Incretins like Liraglutide and Gonadotrophin like Human Chorionic Gonadotrophin (HCG) have shown significant hopes at least in the observational studies.

Human Chorionic Gonadotrophin (HCG) has been hypothesized to drive the metabolic center in the hypothalamus to give signals to consume the stored body fat as the primary source of energy in a state of calorie deficit. This happens through a complex signalling network and is an area of extensive research today.

HCG has an inherent property of TSH and LH. This might be an underlying mechanism of its action on metabolic pathway and weight management. In an attempt to bring various specializations together to discuss the aging process and Antiaging approach, “Antiaging Medicine And Research (AMAR)” conducts frequent workshops and annual conference, INDOMEDICON.

After successful conferences in 2009, 2010, 2011 and 2013, Antiaging Medicine and Research (AMAR) successfully conducted INDOMEDICON-2014: 5th Antiaging Medicine And Research Conference on 14th, 15th and 16th of February at Holiday Inn, Mumbai. The theme of the conference was “ Approach to the Aging Youth of Today”. The conference was attended by more than 150 doctors from India and other countries. The issues of “Hormonal Imbalances” , “Obesity” and “Skin Aesthetics” were discussed in the three days academic fiesta.

About the author

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