

4<sup>th</sup> Global Congress on

# SPINE AND SPINAL DISORDERS

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**Where did it all start? What has generated such a major change in many diverse pathologies in the last 150 years?**

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The field of apnea creates an umbrella where very diverse pathologies have elevated incidences. This may in part explain these links and give a reason to focus on causative factors and on early signs of these processes. Various environmental factors impair midface growth and thereby influence growth patterns of airways and jaw relationships and the musculoskeletal relationships of both nasal and oro-pharyngeal airways. This paper gives clinical and both anatomical and neurological weight to Costen's 1934 explanation of the multitudinal implications of his term for a dysfunctional jaw joint -The Great Imposter. The paper looks at both the implications of a poor airway as manifest in growth, metabolic, inflammatory, neurological and psychological/developmental areas. The paper looks at the research of young showing the links between intermittent hypoxia and systemic inflammation. These are the visible results of the inevitable mis-match between upper and lower jaws where the midface is preferentially impacted by early stage adverse growth. In summary the paper links the various clinically seen outcomes, often treated symptomatically and with varying success. Changes in these physical dimensions, impacts on breathing, sleep, neurological and metabolic processes. The ability to generate systemic inflammation, arterial damage and metabolic changes from birth shows that most pathology is not a short-term event but rather a cultural one that is a reflection of lifestyle and attendant dietary and social change. Where intermittent hypoxia via a distortion of a normal adaptive process can open the inflammatory cascade gives clarity to Costen's comments.

## Biography

David Zimmerman has been interested in craniofacial pain, sleep and breathing after completing a two years course (Diploma in Clinical Dentistry) in Orthodontics.

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