

## Integrative Dentistry: A Practical Approach

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**Abstract:** Integrative dentistry as the very name denotes implies an integrated approach to dentistry, making it a part of the whole as opposed to viewing it as a separate entity divorced from the rest of the body. Holistic dentistry as integrative dentistry is also known as aims to root out all such dental procedures which could cause potential damage to the overall health and well being of the patient. Without getting involved in the controversies surrounding this particular form of dentistry, an effort is made to focus on some of their practices which appear to have a sound rationale behind them – simple safe practices that have many proven benefits and no known side effects. Since many of their practices find a resonance in our age old tradition of Ayurveda it becomes even more relevant in our part of the world. The objective being to incorporate those which make sense and discard those that do not!

**Keywords:** Ayurveda, benefits, dental practices, Integrative dentistry, rationale.

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### I. Introduction

Integrative dentistry as the very name denotes implies an integrated approach to dentistry, making it a part of the whole as opposed to viewing it as a separate entity divorced from the rest of the body. Holistic dentistry as integrative dentistry is also known as encompasses both modern science and knowledge drawn from the world's great traditions on natural healing. These practices include, but are not limited to : homeopathic therapies, herbal remedies, craniosacral therapy, and acupuncture.<sup>[1][2]</sup> However there is lack of scientific research which supports such treatments,<sup>[3]</sup> although it may be mentioned here that more than 40 % of the American public use unconventional medicine.<sup>[4]</sup> Unconventional dentistry and unconventional medicine may be defined as “ a broad set of health care practices that are not readily integrated into the dominant health care model, because they pose challenges to diverse societal beliefs and practices (cultural, economic, scientific, medical and educational).<sup>[5]</sup> Professional debates reflect the depth of emotion and confusion surrounding the issue of unconventional dentistry.<sup>[6]</sup> Integrative dentistry is basically looking to do away with certain products extensively used in our field as well as certain dental procedures which may in the long term have a detrimental effect on the well being of the patient. And so while Dental and medical sciences do recognize the need for well- designed research in this particular field,<sup>[7]</sup> it cannot be denied that some of their practices are based on solid rationale and should not be discarded out of hand!

### II. Aim

The Latin phrase: *Primum non nocere* , literally means “First do no harm”! Another equivalent phrase found in the Epidemics, Book I, of the Hippocratic school states: “either help or do not harm the patient”. Thus whereas it may not always be possible to heal a patient, the principle aim as an ethical health professional at ALL time should be to do NO harm!

A little in depth study of integrative dentistry reveals that many of their practices are astonishingly similar to those that have been followed in the subcontinent since times immemorial under the garb of Ayurveda. Over the centuries Ayurveda practitioners developed large numbers of medicinal preparations for the treatment of various ailments and diseases which were derived from nature.<sup>[8]</sup> Today when the world over is shifting to the natural, we who have been blessed with the richest heritage in this field seem to be throwing out the baby with the bathwater by closing our minds to all that we consider old hat! Isn't it time to throw out all pre conceived notions and weigh up the pros and cons objectively in order to incorporate in our work what we perceive as logical and discard that which we do not!

### III. Implementation

The ludicrous claims by leading brands of toothpastes that we hear blaring over our television sets leave us cringing with embarrassment as trained dental professionals. What utter hogwash!! Yet, undoubtedly it's a booming industry! Products like sodium lauryl sulphate are well known carcinogens, yet are considered essential ingredients of these toothpastes as they are responsible for their foaming action. Saimbi et al (1994) tested the antiplaque efficacy of Neem extract, Ayurvedic tooth powders and commercial tooth pastes. Neem extract came out on top and commercial tooth pastes were the last. Therefore we could try advising non-toxic

toothpastes that use natural antibacterial agents and breath fresheners such as neem, licorice, eucalyptus, clove and peppermint instead to our patients.

Chewing sticks or 'datun' as they are called may be advised as an adjunct to tooth brushing. Ayurveda insists on the use of herbal brushes, approximately 9 inches long and the thickness of one's little finger. The method of use is to crush one end, chew it, and eat it slowly.<sup>[9]</sup> Present day research has shown that all the chewing sticks described in ancient Ayurveda texts (circa 2000 BC) have medicinal and anti-cariogenic properties.<sup>[10]</sup> Venugopal et al (1998) analyzed a total of 2000 children (1-14 years of age) in Mumbai for caries prevalence. The children using the neem datum were found to be less affected with dental caries.<sup>[11]</sup> Besides the antibacterial and antiseptic properties of the sap of 'datuns' the chewing of these promotes salivation which cleanses the oral cavity. Not only that, the continuous chewing action helps in proper development of jaws, as the soft processed diet consumed by the children nowadays tends to lead to under developed jaws which is one of the major contributory factors of malocclusion.

Oil pulling is an oral detoxification procedure that is simply done by swishing a tablespoon of oil in your mouth for around 20 minutes. It has been used extensively as a traditional Indian folk remedy for many years to prevent decay, oral malodor, bleeding gums, dryness of throat, cracked lips and for strengthening teeth, gums and the jaw.<sup>[12]</sup> Brushing being contra indicated in the cases of mouth ulcer, fever, indigestion, those having tendency to vomit, asthma, cough and thirst<sup>[13]</sup>, oil pulling is recommended to clean the oral cavity in all these cases in Ayurveda. As conventional dentists if we find it hard to believe these claims...so be it! Let's not give them any credence!! But can we debunk the evidence that fats are caries protective and although there are many theories proposed for this let us look at the simplest one that proposes that fats may lubricate the tooth surface and prevent penetration of acid to the tooth enamel (i.e the "greased" tooth is impervious to acid). So if for nothing else oil pulling should be an effective method to bring down caries prevalence.

Gum massaging is another much neglected aspect of modern dentistry. A firm gum massage with the thumb and index finger can work wonders not only to prevent the onset of gum disease but also to help reverse it in the initial stages! Squeezing out the stagnant blood establishes fresh blood circulation which not only takes away the toxins and bacteria from the affected site but also leads to laying down of new gingival fibers which by adhering firmly to the tooth surface eliminate any pocket formed. In other words, massaging gums stimulates increased blood flow thereby activating the body's natural defenses via the immune system.

Tea/coffee and tobacco stains can be effectively removed with baking soda. And crushed strawberry applied on the teeth and brushed off after a minute leaves the teeth bright and shining!

Amalgam restorations are a big no-no in holistic dentistry because of the ill-effects associated with the mercury in them. A growing number of studies suggest that the mercury in these fillings leech into our body as we chew, and when we brush or grind our teeth. Recently University of Georgia microbiologist Anne Summers, PhD, conducted a study using monkeys and found that mercury leached out into the vital organs. Some researchers believe it could be a significant health issue. In 2009 the U.S. Food and Drug Administration (FDA) changed the information on its website about amalgam fillings, classifying them as moderate risk. The shift in the tide on the mercury is an important victory for holistic dentistry. Although tooth colored restorations seem to be the material of choice these days because of their pleasing aesthetics, conservation cavity preparation and shorter working time; maybe it's time for those of us who are still working with amalgams to finally bid goodbye to them!

Formoal cresol is another such medicament that is in the eye of the storm because of its carcinogenic potential. Yet! Most of us still reach out for that bottle while performing certain pulp procedures, smothering our conscience by reasoning: How much harm can a couple of dressings do? But when there are alternatives available, should we not be opting for something safer?

X-rays have over time been the subject of much controversy as radiations from these have been linked to cancer and in case of dental x-rays, brain tumors specifically. We need to take steps to limit dental x-ray exposures only when absolutely essential! At the same time choosing to invest in digital x-ray machines which are purported to give 50 % less radiation exposure as compared to x-ray machines of old. Another precaution to be followed at all times should be a separate x-ray room with lead shields and aprons for the protection of our patients as well as the staff.

Antibiotic resistance is a major life threatening issue currently on the radar of the WHO! Indiscriminate use of broad spectrum antibiotics has led to emergence of mutant strains of bacteria that are immune to ALL antibiotics. This is an iatrogenic problem caused by health professionals globally who prescribe broad spectrum antibiotics for the slightest problem with the idea of getting the patient of their back! And we, dental professionals have certainly done our bit to contribute to this problem. We need to do a serious rethink on this and prescribe them when ACTUALLY needed and not otherwise!

#### **IV. Conclusion**

Although we as conventional dentists may not concur with all the practices of holistic dentistry, it definitely is high time that we stepped back to analyze some of their practices which appear rational and logical. And make a concerted effort to incorporate them in our day to day working, endeavoring to heal humanity adhering to the highest ethical commitment demanded by our profession which states “First do no harm”!

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