

HBOT: The oxygen revolution therapy and its potential

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Hyperbaric Oxygen Therapy (HBOT) is a specialised oxygen treatment that enhances the body's natural healing processes. It is called the oxygen revolution therapy due to the marvelous outcome of treatment. The combination of increased atmospheric pressure and oxygen in a total body chamber treats a wide variety of medical conditions.

Healing cannot take place without appropriate oxygen levels in tissues and cells. Many illnesses and injuries fail to heal because sufficient oxygen is unable to reach the damaged area. Inflammation, swelling, and reduced blood flow prevent oxygen from reaching injured tissues. Hyperbaric oxygen (usually at an increased atmospheric pressure) stimulates blood flow, which allows for the growth of new blood vessels into the injured tissue. HBOT provides extra oxygen to tissues and cells with minimal side effects.

What are the benefits? Many illnesses and injuries fail to heal because of inadequate oxygen levels. Inflammation,



swelling, and reduced blood flow contribute to non-healing. Adequate oxygen is unable to reach the damaged area. Increased oxygen under pressure (HBOT) provides this extra oxygen to tissue and cells with minimal side effects. HBOT treats cumulative wounds of life (aging).

- Expedited healing
 - New cell regeneration
 - Anti-aging
- Dr Raghieb Manzoor, Founder, Managing Director and Chief Consultant of CritiCare Research Centre Pvt. Ltd. explained in

details about the HBOT. He explains the scope of treatment by HBOT to a wide range of diseases including Autism. Post traumatic brain injury patients get the most benefit of this treatment. Sometimes, burn patients get very rapid and tremendous healing benefit from HBOT.

According to Dr Manzoor, the treatment option has not yet attracted the attention of the physicians in Bangladesh, but it is being used in some facilities. Considering many benefits, he opined that HBOT could heal many patients who otherwise

could not make it. **Conditions treated by HBOT** Hyperbaric oxygen is used to treat all conditions which benefit from increased tissue oxygen availability, as well as infections where it can be used for its antibiotic properties, either as the primary therapy, or in conjunction with other drugs. The list contains more than 70 medical conditions.

- These are common conditions that are treated with HBOT:
- Acute Carbon Monoxide Poisoning
 - Acute Decompression Sickness (The Bends)
 - Air or Gas Embolism

- Compartment Syndrome/ Crush Injury/Other Traumatic Ischemias
- Diabetic and Selected Wounds
- Exceptional Blood Loss (Anemia)
- Gas Gangrene
- Intracranial Abscess
- Necrotising Soft Tissue Infection
- Osteomyelitis (Refractory)
- Osteoradionecrosis and Radiation Tissue Damage
- Skin Grafts and (Compromised) Flaps
- Thermal Burns

Can HBOT help you? Yes. If your condition involves injury, wounding, loss of blood supply, or inflammation, it would be surprising if HBOT did not help you. It is said that it has the potential to restore your life.

Based on how HBOT works, by treating disease processes that are common to many diseases, it is highly probable that HBOT could help you if dosed properly. Proper dosing is determined by specialist trained physicians. If dosed properly, HBOT has an excellent chance of helping you or your loved one.

To see the full interview of Dr Raghieb Manzoor you can visit <http://bit.ly/HBOTinterview>

GUIDELINE



Diabetes group updates guidance on medical nutrition therapy

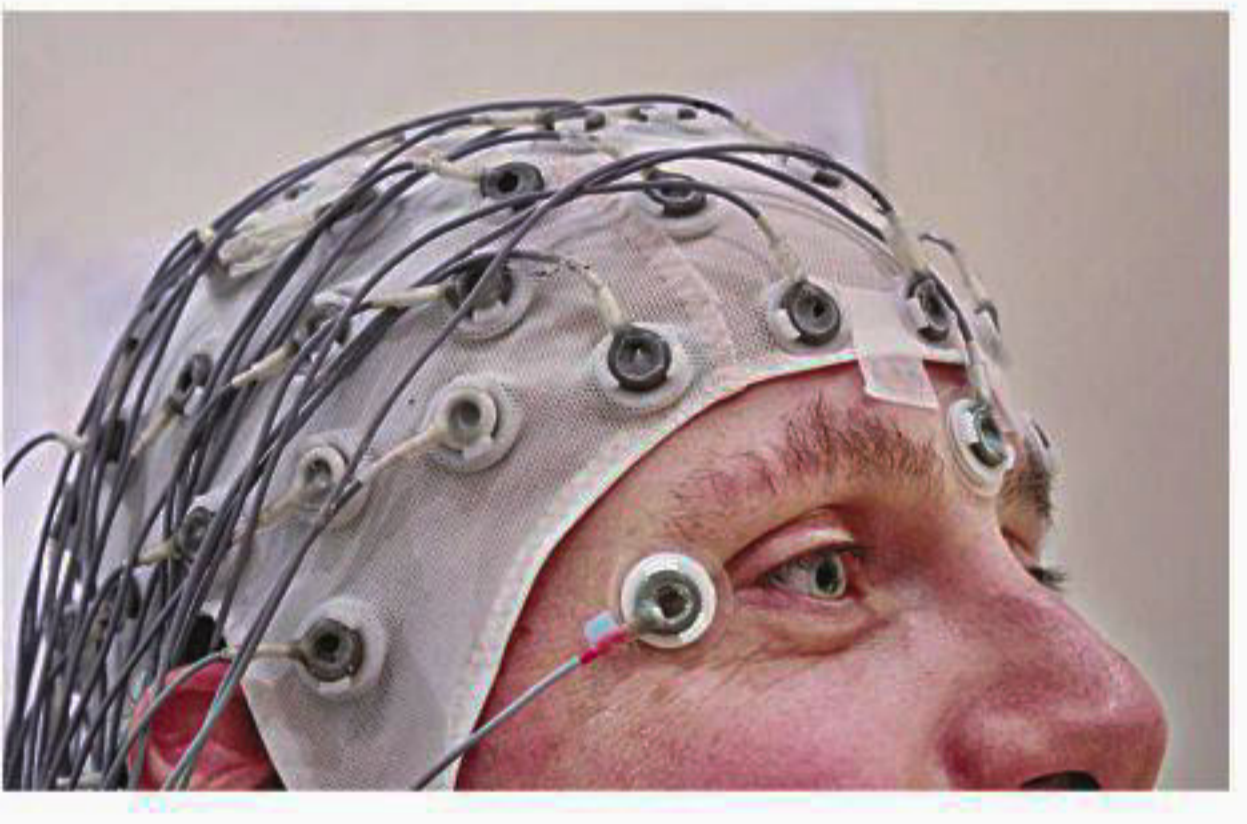
The American Diabetes Association's new consensus report on medical nutrition therapy includes, for the first time, advice on patients with prediabetes. Among the recommendations, published in Diabetes Care:

Patients with prediabetes who are overweight or obese should be referred to an intensive lifestyle intervention with personalised goals, like the Diabetes Prevention Programme, and/or to individualised medical nutrition therapy provided by a registered dietitian nutritionist. Evidence supports losing 7%-10% of body weight.

Adults with type 1 or 2 diabetes should be referred for individualised medical nutrition therapy both at diagnosis and as health needs change throughout life. Research shows that nutrition therapy can lower haemoglobin A1c at least as well as type 2 diabetes medications.

The ideal percentages of calories from carbohydrate, protein, and fat vary in people with diabetes and prediabetes, so "macronutrient distribution should be based on individualised assessment of current eating patterns, preferences, and metabolic goals."

HEALTH bulletin



Brain stimulation treatments for depression

The growing use of repetitive transcranial magnetic stimulation (rTMS) has increased the visibility and acceptability of nonsurgical brain stimulation approaches to depression treatment. Covering multiple variants of rTMS, several techniques for administering electroconvulsive therapy (ECT), and new approaches such as magnetic seizure therapy and transcranial direct current stimulation (tDCS), this network metanalysis using both direct and indirect comparisons of treatments is timely and clinically important.

The analysis covered 113 trials involving 6,750 patients and 18 treatments and showed, in sham-treatment comparisons, greatest efficacy for bitemporal and high-dose right unilateral ECT, followed by priming rTMS, magnetic seizure therapy, bilateral rTMS, bilateral theta burst stimulation, low-frequency right rTMS, intermittent theta burst stimulation, high-frequency left rTMS, and tDCS.

In comparisons with other active treatments, bitemporal ECT was the most effective of all modalities, followed by high-dose right unilateral ECT. Evidence was thought to be too limited for current adoption of some novel and understudied therapies (e.g., priming and theta burst rTMS).

Obese car commuter linked to 32% increased death risk

STAR HEALTH REPORT

New research presented at this year's European Congress on Obesity in Glasgow, Scotland shows that individuals with obesity who commute by car have a 32% higher risk of death, from any cause, compared with those individuals with a normal weight and commute via cycling and walking. The study is by Edward Toke-Bjølgerud, University of Glasgow, UK, and colleagues.

Previous work, using UK Biobank data, has shown that active commuting, mainly cycling, was associated with a 50% lower risk of death, from any cause, and

heart disease compared to car commuting. Since 57% of men and 66% of women in the UK are overweight or obese - a condition linked with a range of poor health outcomes - the authors of this new research aimed to investigate how different modes of active commuting (car, cycling, walking, mixed-mode) might alter the association between obesity and adverse health outcomes.

Dr Carlos Celis, from the British Heart Foundation Glasgow Cardiovascular Research Centre at the University of Glasgow and lead investigator of this work, reported that during the follow-up a total

of 2,425 participants died and 7,973 developed heart disease. Compared with having a healthy body weight and reported mixed active commuting (walking and cycling to and from work; reference group), being obese combined with car commuting was associated with a 32% higher risk for premature death, a doubling of risk of heart disease mortality and a 59% increase in risk non-fatal heart diseases.

The authors conclude: "Our findings, if causal, suggest that people with overweight or obesity could potentially decrease the risk of premature mortality if they engage in active commuting."



E-cigarettes more effective in facilitating smoking cessation

STAR HEALTH REPORT

Proponents of electronic cigarettes often advocate use of e-cigarettes ("vaping") to facilitate smoking cessation. Like many other parts of the world, vaping is increasing also in Bangladesh. Now there is a great hope for those who start vaping as a tool of smoking cessation.

In a recent U.K. study, researchers identified 884 adult smokers who chose a quit date and were randomized to either e-cigarettes or nicotine-replacement therapy. Those in the e-cigarette group were given starter kits; those in the nicotine-replacement group were permitted to choose from various products (e.g., patches, gum, lozenges); many used combinations of products. All participants were given multisession behavioral support.

The rates of abstinence from smoking at 1 year were 18% in the e-cigarette group and 10% in the nicotine-replacement group (P<0.001). Among abstainers in the e-cigarette group, 80% still were using e-cigarettes at 1 year; among abstainers in the nicotine-replacement group, only 9% were still using nicotine-replacement products at 1 year.

E-cigarettes were more effective than nicotine replacement in facilitating smoking cessation; however, many participants in the e-cigarette group who stopped smoking combustible tobacco continued to use e-cigarettes at 1 year. This study's 1-year abstinence rates in the 10% to 20% range are typical for pharmacologic smoking-cessation interventions.

Bangladesh government is committed to tobacco control. Prime Minister Sheikh Hasina hopes it will be possible to make Bangladesh a tobacco-free country within 2040 in order to achieve the Sustainable Development Goals (SDGs). Vaping could be instrumental to reach that target.



World Immunization Week 2019

(24 - 30 April 2019 Coordinated Universal Time)

Theme: #VaccinesWork

World Immunization Week - celebrated in the last week of April - aims to promote the use of vaccines to protect people of all ages against disease. Immunization saves millions of lives every year and is widely recognized as one of the world's most successful and cost-effective health interventions. Yet, there are still nearly 20 million unvaccinated and under-vaccinated children in the world today.

The theme this year is **Protected Together: Vaccines Work!**, and the campaign will celebrate **Vaccine Heroes** from around the world - from parents and community members to health workers and innovators - who help ensure we are all protected through the power of vaccines.



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