

Review Group Membership

MaHTAS Reviewer:

Dr. Hanin Farhana Kamaruzaman
Datin Dr. Rugayah Bakri

Disclaimer:

Technology review is a brief report, prepared on an urgent basis, which draws on restricted reviews from analysis of pertinent literature, on expert opinion and / or regulatory status where appropriate. It is subjected to an external review process. While effort has been made to do so, this document may not fully reflect all scientific research available. Additionally, other relevant scientific findings may have been reported since completion of this review.

For further information please contact:

Health Technology Assessment
Section (MaHTAS)
Medical Development Division
Ministry of Health Malaysia
Level 4, Block E1, Precinct 1
Government Office Complex
62590 Putrajaya.

Tel: 603 8883 1246

Fax: 603 8883 1230

Available at the following website:
<http://www.moh.gov.my>

Introduction

Ozone is a controversial gas because although it is very useful in the stratosphere by absorbing dangerous B and C ultraviolet radiations, it is toxic for other systems, especially the pulmonary tract in the troposphere. Ozone therapy has been used for various medical conditions including chronic limb ischaemia, infections, low back pain due to disc problems, age-related macular degeneration and others. However, as stated in Ozone Therapy health technology assessment (HTA) report conducted by Health Technology Assessment Section (MaHTAS), Ministry of Health Malaysia in 2005, the data on the usage of ozone therapy as therapeutic options for various health conditions lacks sufficient safety and therapeutic advantage over available conventional therapeutic modalities. This technology review was requested by Executive Officer of Policy and International Relation Division, Ministry of Health Malaysia following a request from Royal Embassy of Saudi Arabia, Kuala Lumpur to update the HTA report that was published in 2005.

Objective /aim

The objective of this technology review was to assess the safety and efficacy or effectiveness of ozone therapy in the treatment of medical conditions.

Results and conclusions

There were few low level evidences retrieved on the efficacy or effectiveness of ozone therapy in the treatment of certain medical conditions. However, the evidences obtained were limited to some medical problems only such as treatment of back pain and were not sufficient to conclude that ozone therapy is effective in treating other medical conditions such as HIV infections and cancers.

Although ozone therapy is claimed to be minimally invasive and complications related to this treatment are rare, there are a lot of other considerations to take into account before deciding that ozone therapy is safe. Life-threatening event and permanent disability have been reported with regards to the procedures in administrating oxygen-ozone therapy.

Methods

Electronic databases were searched, which included PubMed, Ovid Medline(R), EBM Reviews-Cochrane Central Register of Controlled Trials, EBM Reviews-Cochrane database of systematic reviews, EBM Reviews - HTA Databases, Horizon Scanning database, FDA website, and Google for published reports. The articles included in the search strategy were those which were published within year 2005 to first week of May 2011. Relevant articles were critically appraised using Critical Appraisal Skills Programme (CASP) and evidence was graded according to US/Canadian Preventive Services Task Force (Harris 2001).