INAHTA Brief

### Title Autohemotherapy (Autologous Blood Transfusion) Ozone Therapy – An Update

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 Reference
 Technology Review Report 001/2017, online:

 <a href="http://www.moh.gov.my/index.php/database\_stores/store\_view\_page/30/293">http://www.moh.gov.my/index.php/database\_stores/store\_view\_page/30/293</a>

#### Aim

To assess the safety, efficacy or effectiveness of autohemotherapy (autologous blood transfusion) ozone therapy in the treatment of medical condition.

#### **Conclusions and results**

There was no new high level of evidence retrieved to determine the effectiveness and safety of autohemotherapy (autologous blood transfusion) ozone therapy for cancer treatment, heart disease, stroke, hypercholesterolemia, AIDS, and HIV infection. However, there was very limited evidence on autohemotherapy (autologous blood transfusion) ozone therapy for treatment of chronic limb ischaemia (CLI), hepatitis C (HCV) infection and neurological disorders. The results for CLI suggested better wound healing in the ozone group compared to control group (sterile saline). Similarly, a study reported that patient with HCV became seronegative. As for the neurological disorder, the study measured intermediate surrogate outcome. However, these studies were limited by small sample size, no blinding or having no comparator.

# Safety

In terms of safety, a study reported high incidence of hepatitis infection in autohemotherapy. Actually the autohemotherapy (autologous blood transfusion) ozone therapy exposed patients to blood-borne diseases. Hence, more high quality evidence is needed to proof the safety and effectiveness of autohemotherapy (autologous blood transfusion) ozone therapy for treatment of medical conditions.

# Cost/Cost-Effectiveness

There was no retrievable evidence on the costeffectiveness of ozone therapy.

# **Recommendations (if any)**

Autohemotherapy (autologous blood transfusion) ozone therapy is not recommended for medical treatment. The procedure requires more high level of evidence to support the efficacy and safety in medical treatment.

### Methods

Electronic databases were searched through Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) 1948 to present, and Embase 1996 to 12 January 2017. Searches were also run in PubMed, Horizon

Scanning databases, UM Library website, FDA website and INAHTA for published reports. Search was limited to studies published within 2000s. Google and Google Scholar were also used to search for additional web-based materials and information about the technology. Besides, additional articles were also search by reviewing the references of retrieval articles

#### Further research/reviews required

Ozone therapy especially for autohemotherapy requires high quality control trial to ensure the effectiveness and safety in medical treatment.

# Written by

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