

Title Transnasal Oesophagoscopy (TNE)

Agency MaHTAS, Health Technology Assessment Section,
Medical Development Division, Ministry of Health Malaysia
Level 4, Block E1, Parcel E, Precinct 1,
Federal Government Administrative Center, 62590 Putrajaya, Malaysia
Tel: +603 88831229, Fax: +603 88831230; htamalaysia@moh.gov.my, www.moh.gov.my

Reference Health Technology Assessment Report, MOH/P/PAK/231.12 (TR), online:
<http://www.moh.gov.my/v/hta>

Aim

To assess the safety, efficacy or effectiveness and economic implication of using TNE compared with conventional oesophagoscopy for oesophageal and extraoesophageal diagnostic and therapeutic procedures by otolaryngologists.

Conclusions and results

Seventeen full text articles were included in this report. There was fair level of evidence to suggest that TNE was effective for detection of oesophageal and extraoesophageal lesions such as for screening examination in patients with dysphagia or globus pharyngeus or reflux symptoms, evaluation of patients with head and neck cancer and for detection of metachronous esophageal squamous carcinoma in patients with head and neck squamous cell carcinoma. Evidence also suggested that TNE can be used to perform a variety of procedures such as biopsy of suspicious lesions in the upper aerodigestive tract, placement of wireless pH capsule to measure the pH levels in the oesophagus, transnasal balloon dilation of the oesophagus, secondary tracheoesophageal puncture and management of foreign bodies. There was fair level of evidence to suggest that TNE was well tolerated and can be safely performed in an office setting with topical anaesthesia. Complications associated with TNE were mild and uncommon such as self limited epistaxis, vasovagal reactions that required no treatment and self limited laryngospasm. There was no reported oesophageal perforation or major complication. There was evidence to suggest there was potential direct cost saving derived by performing TNE in the office setting compared with rigid oesophagoscopy performed under general anaesthesia.

Recommendations

Based on the above review, there seemed to be a potential cost saving derived by performing TNE in the office setting compared with rigid oesophagoscopy performed under general anaesthesia. However, the evidence for effectiveness was only of fair level of evidence. It is recommended that the use of TNE is to be limited to the Head and Neck Centres for detection of oesophageal and extraoesophageal lesions and, for therapeutic procedures. Organizational issues such as training, manpower and funding need to be considered.

Methods

Electronic databases such as MEDLINE, EBM Reviews-Cochrane Database of Systematic Reviews, EBM Reviews-Cochrane Central Register of Controlled Trials, EBM Reviews-HTA databases, EBM Reviews-Database of Abstracts of Review of Effects, EBM Reviews-NHS Economic Evaluation Database were searched through Ovid interface. PubMed, INAHTA database, Horizon scanning database, ASERNIP-S and FDA database were also searched. No limits were applied to the search. Additional articles were identified from bibliographies of retrieved articles and contacting the authors. Studies were selected based on inclusion and exclusion criteria. All relevant literature was appraised using the Critical Appraisal Skills Programme (CASP) and evidence was graded based on guidelines from U.S./Canadian Preventive Services Task Force and NHS Centre for Reviews and Dissemination (CRD) University of York, Report Number 4(2nd Edition), March 2001 for test accuracy studies.

Further research/reviews required

More quality clinical research is warranted to provide more high quality scientific evidence.

Written by

Junainah S, MaHTAS, Malaysia
