

Title: Endobronchial diode Laser Surgery: Our Experience

Objective:

To demonstrate Endobronchial laser as a safe and effective tool in our setting.

Design and Methods:

Photoresection is now the standard of treatment of central airway obstruction. Lasers provide the advantage of decreased bleeding and oedema with improved healing. Compared with conventional Nd-YAG lasers, diode lasers are more portable, cheaper and more effective.

We present four patients who underwent Endobronchial diode laser procedures at EWMSC in 2015-16. There was an excision of an endobronchial tumour and three ablative procedures for Tracheal stenosis. All patients underwent General Anaesthesia and flexible bronchoscopy by a bronchoscopist trained in Laser procedures. Pre- and post- Laser images were recorded. Once completed patients had clinical evaluation and repeat bronchoscopy 3 weeks later.

Results:

Resolution of symptoms post bronchoscopy was considered as a positive outcome. Pre and post bronchoscopy images were compared to validate the efficacy of treatment. 3 patients had improvement of symptoms with improved pre and post bronchoscopy images. 1 patient had failed laser ablation for tracheal stenosis due to the fibrous tissue being too thick.

There were no complications.

Conclusion: Endobronchial diode laser surgery is an effective and safe in this setting.

Keywords: Diode laser, Tracheal Stenosis, Endobronchial Tumour, Personal Protective Equipment