

INTRODUCTION

Adenoids, which are nasopharyngeal lymphoid tissue forming part of the Waldeyer's ring, were initially described in 1868 by Meyer (*Costantini F et al., 2008*).

Present from early gestation, *adenoid* growth continues until about 6 years of age, after which atrophy occurs, adenoidal hypertrophy during childhood may both fill the nasopharynx and extend through the posterior choanae into the nose, resulting in nasal airway stenosis, impeding airflow. There is a significant relationship between the endoscopically determined size of obstructive adenoid tissue and symptomatic nasal obstruction in children (*Wang DY et al., 1995*).

Adenoidal hypertrophy is a common condition in children and can cause symptoms such as mouth breathing, nasal discharge, snoring, sleep apnea, and hypo nasal speech (*Tankel JW and Cheesman AD, 1986*). It also contributes to the pathogenesis of rhino sinusitis, recurrent otitis media, and otitis media with effusion (*Emerick KS and Cunningham MJ, 2006*).

Sequelae include sleep-disordered breathing, speech anomalies, feeding difficulties, chronic sinusitis, and craniofacial growth anomalies. These clinical manifestations may be readily remedied with removal of obstructive hypertrophic adenoid tissue to restore airway potency (*Havas T and Lowinger D, 2002*).

Adenoidectomy is one of the most common procedures performed in children today, either alone or in conjunction with tonsillectomy or insertion of ventilating tubes. The widely used conventional curette adenoidectomy was first described in 1885 (*Costantini F et al., 2008*).

Various diagnostic means have been employed to explore the nasopharynx and evaluate the volume and position of the adenoid tissue, but, in the majority of cases, surgery itself has been conducted blindly. After the surgical intervention, surgeons often check the nasopharynx by means of digital palpation or, occasionally, with a laryngeal mirror, the latter method also enables residual tissue to be removed with a curette (*Costantini F et al., 2008*).

The main disadvantage of curettage is that it is a relatively "blind" technique. It may lacerate the choanae and torus tubarius, gauge the nasopharyngeal mucosa or skim the *adenoid* bulk leaving behind obstructing tissue particularly at the Eustachian tube orifices, high in the nasopharynx or at intranasal protrusions (*Koltai PJ et al., 1997*).

Recurrent *adenoids* are most probably due to regrowth of residual lymphoid tissues left as a result of blind removal (*Emerick KS and Cunningham MJ, 2006*).

Complications such as bleeding, inadequate removal, Eustachian tube stenosis and nasopharyngeal stenosis though uncommon are best prevented by precise resection of adenoid tissue with preservation of integrity of nasopharyngeal structures. Dissatisfaction with conventional technique in adequately and safely removing the adenoid tissue has leads to the development of alternative methods. These have been made possible by developments in fiber optics and endoscopic instrumentation (*Huang HM et al., 1998 ; Yanagisawa E and Weaver EM, 1997*).

A number of Authors have described visualization of the operative field, during surgery, with a laryngeal mirror, trans-nasal or trans-oral endoscope, these Authors employed curette, suction-coagulator, forceps and trans-nasal or trans-oral microdebrider as surgical tools for the removal of the adenoids (*Cannon CR et al., 1999 ; Stanislaw P et al., 2000*).

The powered-shaver method has been applied in a number of ways. It may be the primary technique, used as an adjunct to curettage, or coupled with other methods (*Havas T and Lowinger D, 2002*).

While there is a perception that shaver adenoidectomy is more effective in clearing adenoid tissue compared with curettage, this has yet to be objectively assessed. We under talk this study to evaluate the efficiency of removal of obstructive adenoid with the traditional curette technique to determine whether transoral video endoscopic adenoidectomy with microdebrider would attain better clearance.