

Endoscopic Powered Adenoidectomy with 90⁰ XPS Blade

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"Adenoids" is pathological hypertrophy of nasopharyngeal lymphoid tissues sufficient to cause obstruction of nasopharynx and/or eustachian dysfunction. Adenoidectomy is surgical reduction of such hypertrophy. It involves excision of the lymphoid tissues obstructing the airway followed by hemostasis. While curette excision is the traditional method of excision, powered shavers offer higher precision in excision. When coupling endoscopy with powered excision, safety is added to precision, and the surgeon can selectively clear lymphoid tissue from around the eustachian tubes and choanae.

Combined adenoidal hypertrophy (causing nasal and Eustachian tube dysfunction) and palatal incompetence is a surgical dilemma as adenoidectomy can worsen palatal incompetence. The selective adenoid excision with powered shavers can resolve this problem by excising the part of the adenoid at the choana and around the Eustachian tubes and keeping the part of the adenoid at Passavant ridge and hence does not interfere with velopharyngeal sphincter and palatal competence.

As discussed before, the *120⁰ blade* has been found ideal for endoscopic adenoidectomy. The following comments concern the trial to test the *90⁰ blade* instead:

- 1- Its angulation permits working around the soft palate (without retracting it) in the traditional tonsillectomy position.
- 2- Its cutting window is perfectly visualized by the endoscope introduced alongside the floor of the nasal fossa.
- 3- Its easy manipulation to selectively excise lymphoid tissues around the eustachian tubes and choanae; areas that are hardly cleaned by currettes.
- 4- The M4 Rotatable RAD 90 curved plate with its 360⁰ tip rotation offers more as regards cleaning difficult spots.

- 5- In cases of incompetent palate such as submucous cleft palate, short palate and scared palate, adenoid hypertrophy may help velopharyngeal closure and therefore adenoidectomy has generally been considered as a contraindication although the adenoid might cause nasal and Eustachian obstruction. Powered adenoidectomy with the 90⁰ & 120⁰ blades will be an ideal solution for this dilemma as this technique is so selective in removing the obstructive part of the adenoid around the Eustachian tube orifice and at the choanae and at the same time preserving the part of the adenoid at Passavant ridge helping velopharyngeal closure.

Hemostasis is effectively managed with packs and sometimes with cauterization of bleeders under optimal endoscopic vision.

The accompanying video demonstrates these points in a 7 y.o. female child with palatal incompetence grade I-II.