OBJECTIVE: describe the technique, study the short - and long-term effect of intracapsular tonsil reduction in children by Interstitial Bipolar Radiofrequency Technique IBRT (Ellman), report our experience.

From January 2006 to May 2018, 280 children with Sleep Disordered Breathing (SDB) and tonsil hyperplasia have been treated with Interstitial Tonsil Reduction (ITR) by bipolar radiofrequency technique. An adenoidectomy with cold steel was performed in the same surgical session for 86% of cases. Nearly every Patient was assessed prior to surgery, at 15 days, one, three, six, 12 and 24 months postoperatively. Effects of surgery were assessed by inspection and on the clinical point of view by a complete questionnaire for the Patient and for the parents, focusing on, at short-term evaluation, secondary postoperative bleeding, local pain, grade of easier recovery and food intake and at medium / long-term evaluation, general health and quality of life, resolution of upper-airway obstructive symptoms and ENT infections.

RESULTS: Pain just after the surgical procedure was really very low and food intake surprising nearly normal and already at 15 day / one month evaluation snoring and general quality of life were quite satisfactory. At medium / long-term follow-up, no Patient presented regrowth of tonsil remnants and ENT infection rate was in a normal range and, however, episodes of throat infections after surgery were still fewer than before surgery.

According to our experience, tonsil reduction in children by Interstitial Bipolar Radiofrequency Technique - IBRT is not only a valid surgical solution in children with Sleep Disordered Breathing (SDB) and tonsil hyperplasia, but could substitute classic tonsillectomy or tonsillotomy in children with clotting disorders or religious issues as Jehovah’s witnesses and, in our opinion, could be considered a valid, cost / effective, alternative to standard tonsillectomy also in children with frequent episodes of throat infections.

CONCLUSIONS: TONSIL SURGERY IN CHILDREN: ADVANTAGES OF INTERSTITIAL BIPOLAR RADIOFREQUENCY. IT’S TIME TO CHANGE. Antonio Palma, M.D., Giancarlo Botto, M.D., Attilio Denaro, M.D. and Vincenzo Calabrese, M.D.
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