Background: Tonsillectomy or adenotonsillectomy ("tonsillectomy") are commonly performed in the United States and represent >15% of all surgical procedures in children under the age of 15 years. In our study we compare between three surgical technique in doing tonsillectomy in pediatric population in regard to pain, status of tonsiller bed, analgesic use, and incidence of bleeding weather primary or secondary.

Conclusion: In our study we found that Coblation had significantly less pain score in compare to Microline and Bipolar. Coblator had better tonsillar bed status at time of follow up with patients requiring less analgesic use. No statically significant difference in rate of bleeding.

Objective: Comparing Microline ENTceps® to Coblation and Bipolar electrocautery tonsillectomy in pediatric population

Method: Children less than 13 years old undergoing tonsillectomy with or without adenoidectomy were selected for this Prospective, single blind Randomized control trial from February to September 2017. Participant allocation for the three studied surgical intervention was done based on birth date. Visual analogue score ranging from 0 to 5 was used to assess the pain on daily basis. Tonsillar bed (healed or healing) status and the use of analgesic was assessed at follow up. Bleeding incidence primary or secondary were recorded. Information collection by the physician was one/two week post op by follow up in clinic or by phone contact.

Results: Pain status was tracked from day 1 to day 7 post operation. highest overall pain was related to Bipolar 1.92 then 1.47 for Microline and least was related to Coblation with 1.30. Regarding analgesic use, 22% Microline was using analgesia at 1 week follow up compared to 10% for Coblator and 34% in Bipolar. For the tonsillar bed, 48% of Microline were healed completely at the time of follow up compared to 48% in bipolar and 70% in Coblator.

There was no significant differences in rate of bleeding between all three surgical intervention.