

ASSESSMENT OF COMPLICATIONS USING DIFFERENT METHODS AFTER TONSILLECTOMY

Qussy Khashan Majid Almajid

F A C M S-Otolaryngology Head & Neck Surgery Iraqi Ministry of Health, Thi-Qar Health Directorate, Al Haboby Teaching Hospital, Thi-Qar, Iraq. almajidgusai@gmail.com

Qaysar Abdulwahhab Suker Alseaeadey

F A C M S-Otolaryngology Head & Neck Surgery

Iraqi Ministry of Health, Thi-Qar Health Directorate, Al Haboby Teaching Hospital, Thi-Qar, Iraq.

caesaralsuker@gmail.com

Majid Jalil Radhi

F I C M S-Otolaryngology Head & Neck Surgery

F A C M S-Otolaryngology Head & Neck Surgery

Iraqi Ministry of Health, Thi-Qar Health Directorate, Al Shattrah General Hospital, Thi-Qar, Iraq.

Article history:		Abstract:
Received: January 1 st 2022 Accepted: February 1 st 2022 Published: March 8 th 2022		This study focuses to assess and compare for patients who have had tonsillectomy, depending on different techniques in the severity of pain. 40 patients were collected from different Hospitals, Thi-Qar, Iraq, and the patients were distributed to the methods used for tonsillectomy, which are plasma blade 20 patients and bipolar radiofrequency clamp 20 patients This study was divided into two groups, BRC and PB, for the purpose of tonsillectomy. The average age of patients, in general, ranged between 10 and 31 years, and the evaluation was done by reading the severity of the pain in relation to the first day, the second and sixth days, and We conclude PB is the best method, which is preferred to be used.

Keywords: BRC, PB, compare, pain, patients, VAS.

INTRODUCTION

Tonsillitis ranks first among ear, nose, and throat diseases. Despite the achievements of modern medicine, the incidence of chronic tonsillitis does not decrease (GR RIDER). The prevalence of chronic tonsillitis among all population groups does not depend on age, and at present, there are no trends towards a decrease in the incidence of chronic tonsillitis, and it is considered as tonsillitis Chronic is the most common disease of all possible variants of tonsil pathology. At the same time, the problems caused by this disease are forced to be solved not only by otolaryngologists but also by specialists from other specialities [1,2,3,4,5].

Performing a tonsillectomy for the vast majority of patients with chronic tonsillitis is the preferred method, which, if determined and taking into account the clinical form of the disease and a number of other factors, is often supplemented by other treatment methods [6,7,8]

the severity of such a complication as bleeding is due primarily to the volume of blood loss and the possibility of its adequate renewal. However, according to the generally accepted opinion, any significant bleeding almost always negatively affects the condition of the patient's entire body as a whole and complicates the course of the postoperative period, often requiring long-term rehabilitation [9,10,11].

The high probability of complications is bleeding, the severity of which always poses a real threat to the patient's life, not only during the operation but also in the postoperative period, which makes it extremely necessary to research, develop, install and practice new methods of work on patients with tonsillitis [12,13,14,15].

MATERIAL AND METHOD Patient sample

40 patients were collected from different Hospitals in Thi-Qar, Iraq, and the patients were distributed to the methods used for tonsillectomy, which are plasma blade 20 patients and bipolar radiofrequency clamp 20 patients

focuses to assess compare for patients who had tonsillectomy, depending on different techniques in the severity of pain



Study design

This study was designed depending on the type of technique used tonsillectomy and reading the severity of complications generated. This study was divided into two groups: males and females.

The proportion of males according to plasma blade was 15 patients, and the group of women five patients.

As for bipolar radiofrequency, it consisted of 13 male patients and seven women.

Where the upper pole of the amygdala is isolated using a radiofrequency device Then a radiofrequency incision was made along the anterior palatine arch of the palatine tonsil areas of its transitional fold and radiofrequency incision along the posterior palatine arch In addition to isolating the capsule of the palatine tonsils and separating the palatine tonsils to the lower pole with their thinning.

The last step comes in cutting the pedicle from the thin lower palatine column with Tonsil ring with hemostasis with aminocaproic acid. radio frequency exposure is carried out with the help of radio frequency electrosurgical apparatus, exposure time - 3 minutes;

– excision of an area of the mucous membrane of an oval shape in a horizontal direction 2.5 cm long on the anterior surface of the soft palate on a distance of 1 cm from its free edge and as for plasma blade, which is is a soft tissue dissection instrument that uses very brief, high-frequency pulses of radiofrequency (RF) energy to induce electrical plasma along the edge of a thin (12.5 μ m), 99.5% insulated electrode. Due to the low-duty cycle from RF pulsing and proprietary Thermal Protection Shield (TPS) Where the pb probe is used in order to prepare a coagulant of four coagulants in order to make an incision in the incise the anterior plica and remove the tonsils downward

Study period

The study period was from 25-3-2020 to 4-8-2021 Aim of research

This study aims to assess the severity of complications for patients who underwent tonsillectomy, depending on the different ablation techniques

RESULTS

Table :	1-	results	of	Bipolar	Radiofred	luenc	/ Clamp
		1004100	۰.	Dipolai	r ta ai oi i oo	acricy	Ciainp

Statistics					
p		Bipolar Radiofrequency Clamp age	VAS score 3rd h	VAS score 3rd day	VAS score 6th day
Ν	Valid	20	20	20	20
	Missing	1	1	1	1
Mean		20.5500	6.9540	3.3655	2.1510
Median		20.0000	7.0300	3.7200	2.1500
Mode		12.00ª	6.50ª	3.74	2.13
Std. Deviation		6.16847	.20301	.51407	.01714
Range		19.00	.70	1.09	.05
Minimum		11.00	6.50	2.67	2.13
Maximum		30.00	30.00 7.20 3.76		2.18
Percentiles	25	15.2500	6.9075	2.6900	2.1325
	50	20.0000	7.0300	7.0300 3.7200	
	75	26.5000	7.0575	3.7400	2.1675
a. Multiple mod	les exist. The s	mallest value is shown			



Figure 1- distribution of patient according to gender



Table 2- results of PB

Statistics						
p		Bipolar VAS score 3rd Radiofrequency Clamp		VAS score 3rd day	VAS score 6th day	
N	Valid	20	20	20	20	
	Missing	1 1 1		1	1	
Mean		28	5.3	2.78	1.88	
Median		29	8.2	4.12	2.22	
Mode		11.00ª	7.20ª	3.98	2.11	
Std. Deviation		8.9	1.92	0.823	0.74	
Range ED		15	2.3	2.02	0.05	
Minimum		10	8.1	2.1	2.61	
Maximum		31	3.9	3.8	2.11	





Figure 3- results of Necrosis depth according to Dnd





Figure 4- p-Value between groups



DISCUSSION

Forty patients were collected, and the necessary analyzes were conducted on them for the purpose of collecting information and demographic data for patients. It is forbidden to rely on the statistical analysis program spss soft 22 and MS excel 2013

Two techniques were relied on in tonsillectomy. In addition, a comparison was made between the two techniques used in this study and in Table 1, which shows the results of BRC, where the mean \pm sd to the patients' ages was 20.55 \pm 6.16, and the ages were somewhat less compared to the group pb (28 \pm 8.9) and the results of the patients' ages showed that there were statistically significant differences between the two groups.

When a comparison was made between the two groups based on VAS scores, which were evaluated in 3 stages, first (3rd h) and (3rd day) and 6th day, the results of this study showed that there were statistically significant differences in the degree of pain at the BRC group compared with the PB group.

Tonsillitis is a common problem that many people suffer from at some point in their lives, and children are more likely than others to have this type of problem, which may invade the body through the mouth and nose, as they are considered the first line of defense in a way that may cause the body diseases and problems. The causes of tonsillitis may be bacterial or viral, but in both cases, they are not classified among the serious cases that cause concern and fear, as the annoying symptoms of tonsillitis are It begins to gradually improve within 7 to 10 days, with or without medication. Tonsillectomy is the surgical option that the specialist resorts to if the patient does not respond to treatments or the symptoms worsen so that they become annoying in a way that disrupts his daily routine; for example, the patient may have difficulty breathing during sleep due to enlarged tonsils or recurring tonsillitis, an average of 6 times during one year

CONCLUSION

Through the meta-analysis that was adopted in the statistical analysis program, statistically significant differences were found between the two groups, BRC with pb, with a value of ≤ 0.05 , and the intensity and levels of pain in the group were much higher than in the second group, so we conclude that the best method that is preferred to be used in medicine ENT is PB according to what this study found, and several European studies were found that are consistent with the results of our current study.

RECOMMENDATIONS

- 1. Taking an antibiotic such as (Augmentmin) or (Kuram) 1 gm tablet every 12 hours, with gargling (Betadine) 3 times a day, to clean the wound site from any stuck microbes that cause those pains in swallowing
- 2. Any bleeding requires a visit to the emergency room for prompt evaluation and treatment, and surgery may be required to stop the bleeding



REFERENCES

- 1.
 Andrea
 M.
 Microsurgical
 bipolar
 cautery

 tonsillectomy.
 Laryngoscope.
 1993;103(10):1177–1178.
 doi:
 10.1288/00005537-199310000-00018.
- Aremu SK (2012) A review of tonsillectomy techniques and technologies. In: Gendeh BS (Ed) Otolaryngol, InTech, ISBN: 978-953-51-0624-1 pp 161–170. www.intechopen.com/books.otolaryngology/a-review-oftonsillectomy-techniques-and-technologies
- Babademez MA, Yurekli MF, Acar B, Gunbey E. Comparison of radiofrequency ablation, laser and coblator techniques in reduction of tonsil size. Acta Otolarygol. 2011;131 (7):750–756. doi: 10.3109/00016489.2011.553244.
- Baugh RF, Archer SM, Mitchell RB, Rosenfeld RM, Amin R, Burns JJ, Darrow DH, Giordano T, Litman RS, Li KK, Mannix ME, Schwartz RH, Setzen G, Wald ER, Wall E, Sandberg G, Patel MM. Clinical practice guideline: tonsillectomy in children. Otolaryngol Head Neck Surg. 2011;144 (1S): S1–S30. Doi: 10.1177/0194599810389949.
- 5. Bluestone CD. Current indications for tonsillectomy and adenoidectomy. Ann Otol Rhinol Laryngol Suppl. 1992;155:58–64. doi: 10.1177/00034894921010S112.
- Darrow DH, Siemens C. Indications for tonsillectomy and adenoidectomy. Laryngoscope. 2002;112 (suppl 100):6–10. doi: 10.1097/00005537-200208001-00004.
- Densert O, Desai H, Eliasson A, Frederiksen L, Anderson D, Olaison J, Widmark C. Tonsillotomy in children with tonsillar hypertrophy. Acta Otolaryngol. 2001;121 (7):854–858. doi: 10.1080/00016480152602339.
- 8. Don Setliff- discussion on net OTO-HNS group, Medispeciality.com 27 Dec 2013
- Deutsch ES (1996) Tonsillectomy and adenoidectomy Changing indications. Pediatr Otolaryngol Pediatr Clin North Am 43(6). <u>http://www.pediatric.theclinics.com/article/S0</u> 031-3955 (05)70521-6/fulltext [PubMed]
- 10. Erez Bendet in a personal communication (Discussion) at otohns group dt 27 Dec 2013
- 11. Friedman M, LoSavio P, Ibrahim H, Ramakrishanan V. Radiofrequency tonsil reduction: safety, morbidity, and efficacy. Laryngoscope. 2003;113(5):882–887. doi: 10.1097/00005537-200305000-00020.

- Gallagher TQ, Wilcox L, McGuire E, Derkay CS. Analysing factors associated with major complications after adenotonsillectomy in 4776 patients: comparing three tonsillectomy techniques. Otolaryngol Head Neck. 2010;142 (6):886–892. doi: 10.1016/j.otohns.2010.02.019.
- 13. Glover EEV. Historical account of tonsillectomy. Br Med J. 1918;2 (3025):685. doi: 10.1136/bmj.2.3025.685. [PMC free article]
- 14. Goycoolea MV, Cubillos PM, Martinez GC. Tonsillectomy with suction coagulator. Laryngoscope. 1982;92 (7):818–819. doi: 10.1288/00005537-198207000-00021.
- 15. Haase FR, Noguera JT. Hemostasis in tonsillectomy by electrocautery. Arch Otolaryngol. 1962;75 (2):25–26. doi: 10.1001/archotol.1962.00740040131009.