ORIGINAL ARTICLE

Treatment of Tonsillar Remnants by Monopolar Diathermy, a Study of Safety of Technique regarding Peroperative Bleeding and Improvement of patient's Symptoms

ZAFAR IQBAL[1], RIZWAN AKBAR BAJWA[2], MUHAMMAD NADEEM[3]

ABSTRACT

Aim: To assess the safety of monopolar diathermy, regarding peroperative bleeding in patients of tonsillar remnants and to assess improvement of symptoms of patients of tonsillar remnants
Design: Single Blind interventional type of study.
Place &duration of study: Govt. Kot Khawaja Saeed Hospital Lahore from Sept. 2008 to Sept. 2009.
Methods: Six patients were included in the study.All patients were adults between 18-25 years of age.The results of procedure regarding per operative bleedingand improvement of patient symptoms were analysed.
Results: On analysis of per-operative bleeding,5 patient had 1-2 ml blood loss and one patient had 3 ml blood loss during surgery. The analysis of surgical outcome showed that all the 6 patients had shown improvement in there throat symptoms like sore throat and lymphadenitis.
Conclusion: It was concluded that surgery of tonsillar remnants by monopolar coagulation was a better and safe technique regarding operative blood loss and improvement of patient symptoms
Ke words: Tonsillectomy, monopolarcautery, tonsillar remnants

INTRODUCTION

The history of tonsil surgery goes to Hindu medicine 1000 BC[1,2]. Around, AD30, Aulus Cornelius Celsus was believed to have performed tonsillectomy by using his finger nails .since then many surgical techniques have been observed[3,4]. The ancient techniques were replaced by use of instruments which include snare, guillotine, tonsillotome, ligature etc. The modern hottechniques were introduced in 1973 with the use of CO_2 laser. Later came Nd-YAG laser, KTP laser, Diathermy, plasma excision or coblation, radiofrequency ablation, Harmonic scalpel and thermal welding[5].Tonsillar remnants were common when tonsillectomies were performed by guillotine,significant in number with laser,less common with dissection,minimal with coagulation method[5,6,7].Other reasons for tonsillar remnants were tonsillectomies performed by trainee surgeons and elongated styloid process[8].

The main presenting complaints of patients were recurrent sore throat,otalgia and jugulodigestic lymphadenitis[9].The time lapse between primary tonsillar surgery and presentation for removal of tonsillar remnants was 5-10 years[10].

Electrocautery decreases operative time and intra operative bleeding[11,12,.13].The monopolar cautery creates an electric arc between tissue and instrument which ablate the tissue. So it is easy to clear the tonsillar remnants by electrocoagulation[14,15].

[1,3]*Assistant Pro. ENT, Azra Naheed Medical College Lahore.*
[2]*Assistant Professor ENT, Avicenna Medical College Lahore.*
Correspondence to Dr. Zafar Iqbal, Email: drzaffariqbal2003@hotmail.com, Cell:+923224897179

PATIENTS AND METHODS

The study was conducted at department of ENT Govt. Kot Khawaja Saeed Hospital Lahore and total six patients of tonsillar remnants were operated from Sep 2008 to Sep2009.The age range wasbetween 18-25 years.The study was conducted after approval from hospital ethical committee.Unipolar cauterywas used as a technique for dissection of tonsillar remnants and hemostasis.

Patients of18-25 years of age,belonging to either sex with history of tonsillar remnants and throat symptomswere included in the study.Patients with H/O bleeding disorders were excluded from the study.Tonsillectomy was done by unipolar diathermy and the results of procedure's safety regarding perop bleeding and symptoms improvement were analysed.

RESULTS

Out of 6 patients, 2 patients were between 18-20 years, 4 patients were between 20-25 years of age.On analysis of per-operative bleeding 5 patients had 1-2 ml blood loss. One patient had 3ml blood loss during surgery.

Distribution of age

No of patients	Age in years
2	18-20
4	20-25

Peroperative bleeding

No of patients	Blood loss in ml
5	1-2
1	3

The analysis of surgical outcome showed that all the 6 patients had shown improvement in there sore throat symptoms and lymphadenitis.

Postoperative symptoms improvement

Preoperative symptoms	n	Improvement
Recurrent sore throat	3	Yes
Jugulodigestic lymphadinitis	3	Yes

DISCUSSION

The remnants of disease are an important element,affecting the outcome in every surgical procedure[16].The same is true for our tonsillectomied patients. The exact etiology of remnant is not known. One possible factorforremnants was faulty surgical technique during primary tonsillar surgery. Other causes may be surgery done by junior surgeons, prominent styloid process in tonsillar fossa and immunological simulation due torepeated infections[17,18,19]. According to the results of our study,the average blood loss was between1-1.5 ml .This result shows that unipolar cautery is a good technique to treat the tonsillar remnants. Other option to operate was plasma ablation.On analysis of surgical out come and symptomatic improvement, it was seen that all the 6 patents had shown improvement in symptoms,so reducing the chances ofcomplication related to disease[20]. Further it was seen that treatment of tonsillar by unipolar cautery was better technique[21]. It reduces the burden on pt and operation theater staff, so improving the quality.

CONCLUSION

From the results of our study,itis concludedthat treatment of tonsillar remnants by coagulation has significantly reduced per operative bleeding and reduced operative time,as compared to other conventional methods.The patient's symptoms were improved.It has reduced the morbidity and complication related to disease. The incidence of tonsillar remnants can be reduced by choosing better surgical technique during primary tonsillar surgery.

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