



## TONSILLECTOMY UNDER LOCAL ANESTHESIA IN MALI

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### Abstract

#### BACKGROUND

The objective of this study was to analyze a series of tonsillectomies performed in the ENT Reference Centre of the Health, District IV BAMAKO MALI

#### PATIENTS and METHODS

The study was conducted between June 2003 and May 2013 focused on 166 patients. Patients with chronic tonsillitis, obstructive hypertrophy of the Palatine tonsils, caseous tonsillitis were included in the study.

The method of dissection of the tonsils in sitting position (home position) was the technique used.

### RESULTS

A predominance of female 114 (68.70%) were observed. The average age of the patients was 25 years with extremes from 12 to 54 years. Tonsillectomy was bilateral in all patients of the study. The main indications were: chronic tonsillitis 101 (60.84%). There was no major complication during the postoperative period.

### CONCLUSION

Tonsillectomy under local anesthesia is well tolerated by patients in a tropical environment. Its cost is less.

## INTRODUCTION

The tonsillectomy described for the first time in 1757 by headset in Reims is one of the most common surgical procedures in Otorhinolaryngology (1, 2, 3, 4, 5). The elimination of the chronic infectious of the tonsillitis and obstructive hypertrophy of the Palatine tonsils are very often absolute indications for tonsillectomy (6, 7, 8, 9, 10). In a tropical environment the impact of parasitic and infectious diseases on the health of the population, and the lack of a good technical platform greatly reduce opportunities for the practitioner ENT to achieve safe tonsillectomy under general anesthesia. Therefore, local anesthesia may be for us a mode of anesthesia in surgery of the Palatine tonsils as well in adults than in adolescents, not to mention the lower cost of this technique for a mostly poor population in our country.

The objective of this study was to analyze a series of tonsillectomies performed in the ENT Reference Centre of the Health, District IV BAMAKO MALI.

## PATIENTS and METHODS

The study was conducted between June 2003 and May 2013 focused on 166 patients.

Inclusion criteria: patients with chronic tonsillitis, obstructive hypertrophy of the Palatine tonsils and caseous cryptic tonsillitis.

Exclusion criteria: All patients with indication for tonsillectomy were asked but with disorders of hemostasis or hypersensitivity to a local anesthetic. All patients in the study have conducted a biological assessment of preoperative period to highlight general affection that could constitute a contraindication for tonsillectomy.

The premedication was conducted 1 hour long before the intervention and was based on:

Hydroxyzine (atarax<sup>®</sup>) and paracetamol by oral route, Atropine (dermal route) and Etamsylate (dicynone<sup>®</sup>) by intravenous line, all dosed according to the age and weight of the patient.

The method of dissection of the tonsils in sitting position (home position) was the technique used. It began after brief sprays of lidocaine (an anesthetic) dosed at 5% to achieve contact anesthesia and infiltration of this same anesthetic dosed at 1% in the anterior pillars (third upper, middle and inferior) and the corners of the base of the tongue to an infiltration anesthesia.

Postoperative pain necessitated the use of analgics by intravenous line (I.V line), oral route or suppository and spraying of an inhalant anesthetic and antibiotic.

Still, antibiotic prophylaxis of 5 days was established taking into account the different tolerances of patients.

Tonsillectomy was bilateral in our patients of the study. We had noted no intolerance to the anesthetic used. The postoperative bleeding was minimal in the majority of cases. Only two patients postoperative bleeding was more abundant than usual in the first ten hours so far without a recovery in the operating room.

All the tonsils have benefited from a less traumatic dissection (according to our digito-instrumental method) using less conventional instruments and more fingers, we have not resorted to the electrocoagulation.

PATIENTS	Number	%
<b>SEXE</b>		
Female	114	68.70
Male	52	31.30
<b>AGE</b>		
10-15	10	6.4
16-20	29	17.46
21-25	51	30.74
26-30	49	29.51
31-40	20	12.04
41-45	5	3.01
46-50	1	0.60
51-55	1	0.60
<b>TOTAL</b>	<b>166</b>	<b>100</b>

Table 1. Distribution of patients by sex and age

Only one tonsil with accented fibroadhesia which ablation was difficult necessitated the use of scissors. The intervention lasted on average 30 minutes. The patients spent up to 24 hours under medical supervision after the intervention, most were returning home after the twelve first after intervention.

## DISCUSSION

Despite the wide use of general anesthesia for the ablation of the Palatine tonsils, the realization of this intervention under local anesthesia has not lost its usefulness of our days especially in tropical areas With its many difficulties known (lack of adequate technical facilities, poverty ...)(1, 3, 5, 11, 12, 13 ), where the interest of this work.

study the tonsillectomy concerned above all the age groups of 21 to 30 years (60.25%) with a predominance of female patients (68.70%), confirmed in a good number of studies (1, 2, 3, 8, 14). Chronic tonsillitis are the main indication for tonsillectomy (1, 3, 11, 13). This trend is confirmed in our study as 101 of our patients (60.84%) have presented this indication.

Tonsillectomy for chronic secretion of tonsilolith from Crypts is rare, the discomfort and the foul smell (halitosis) it causes are the main reasons for the removal of tonsils, and our series reported 36 cases (21.68%).

Tonsillectomy for obstructive tonsils is uncommon in adults (4, 15, 16), in our study 29 patients (17.48%) presented, certainly had to do that a toddler his last were unable to benefit from surgery in a timely manner.

The seating position or position of Rose is an ideal location for the tonsillectomy under local anesthesia, because it allows protection of the airway by a decrease in venous pressure, and better muscle tone for good constriction of the blood vessels (1, 3, 5, 12, 15 ). All our patients in the study underwent intervention in this position.

Mastery of per and post-operative bleeding is decisive for the success of the tonsillectomy performed under General or local anesthesia (5, 17, 18, 19).

So successful under local anesthesia depends on: the psychological preparation of the patient, pre-medication, correct infiltration of local anesthetic in the anterior palatine pillars for a retraction to the maximum of the tonsils to the midline in the oral cavity, and the systematic careful revision of the tonsillar lodge looking for any remaining tonsillar source of bleeding (1, 3, 20, 21, 22, 23).

None of the patients in our study presented a bleeding worrying during pre and post-operative period. No ligation of vessels has been performed, as well as any electrocoagulation for any control of hemostasis during the intervention.

The compression of the tonsillar lodges by compresses soaked in hemostatic has remedied bleeding linked to since the surgical intervention.

The postoperative short-term and long-term in our patients were simple.

Some series have reported rare complications: accidental rupture of vessels during the manoeuvre of infiltration of local anesthetic, atlanto axial joint dislocation, modification of the vocal timbre, closed rhinolalia, chronic pharyngitis (11, 13, 14, 18, 24, 25).

## CONCLUSION

The results of this study allow to say that tonsillectomy under local anesthesia is well tolerated by patients, adolescents and adults in a tropical environment with its particular conditions.

The success of such intervention requires in addition to the surgical technique proper in the hands of a well-trained surgeon, premedication quiescent to minimize the emotional factor often non negligible in the patient during the intervention and hemorrhagic risks. With local anesthesia the operation required less time.

Indications	Number	%
Chronic tonsillitis	101	60.84
Caseous tonsillitis	36	21.68
Obstructive hypertrophic tonsillitis	29	17.48
<b>TOTAL</b>	<b>166</b>	<b>100</b>

Table 2. Indications of tonsillectomy

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