



The post-tonsillectomy diet, what use?

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ABSTRACT

Tonsillectomy is an intervention that finds its indications in current ENT surgery. Like any surgery, tonsillectomy carries the risk of postoperative complications. This study evaluates the benefit of a diet restricted to fluids and soft foods, in terms of hemorrhage and post-tonsillectomy pain. This is a comparative retrospective study of 182 patients, who underwent a tonsillectomy in the ENT department of the Avicenne military hospital in Marrakech, during the period from 2013 to 2017. The patients were divided into two groups, the first, subject to a restricted diet, the second authorized to resume a normal diet. This last diet, in the light of our study and the data in the literature, exposes little or no risk of bleeding and does not worsen the pain in post tonsillectomy.

Keywords : Tonsillectomy, Diet, Hemorrhage, Pain

INTRODUCTION

Tonsillectomy or removal of the palatine tonsils is one of the most common surgeries in otolaryngology (ENT) [1]. Like any other surgical procedure, it presents risks and exposes to complications including hemorrhage and pain [2]. To reduce the risk of these complications, certain rules are prescribed postoperatively, in particular a restrictive diet [3]. The objective of our work is to focus on the interest of this diet after tonsillectomy: by comparing the effect on bleeding and pain of two different diets advised to 182 patients divided into two groups and operated for tonsillectomy in the ENT department of the Avicenne military hospital in Marrakech during the period between 2013 and 2017.

MATERIALS AND METHOD

Our work is a retrospective comparative study spread over a period of 5 years from January 1, 2013 to December 31, 2017, conducted within the ENT department of the Avicenne Military Hospital (HMA) in Marrakech. In this study, we identified a population of 182 patients; The patients were divided into two groups: group A (having been put on diet N° 1: restrictive diet made of liquid and cold food for 15 days) included 65 patients and group B (put on diet N° 2: free diet without any restriction and rich in protein from the second post-operative day) included 117 patients.

Were included in our study, all the patients having undergone a tonsillectomy within the department

of ORL of the HMA of Marrakech during the period of study, whatever their age, their sex or their indication of tonsillectomy.

So that there is no statistical bias and for a good interpretation of our results, we excluded from our study all patients who have a pathological history which may affect the results of the study such as: patients having known hemostasis disorders, smoking, diabetics; those who take specific drugs: (non-steroidal anti-inflammatory drug (NSAID), anti-vitamin K (AVK).....), undernourished people or those with malabsorption disorders. .

For all of the patients concerned, we collected clinical and paraclinical data from hospital records. All of the information was noted on a farm report.

We carried out a comparative statistical analysis of different parameters collected for the two groups.

For the assessment of the intensity of pain in the two groups, we used the verbal scale.

All our patients were operated by the same dissection technique under general anesthesia.

RESULTS AND DISCUSSION

Our series included 182 patients divided into 121 children and 61 adults. The median age in group A was 10 years and in group B was 11 years.

There has been an almost equal distribution between the two sexes with a slight male predominance in both children and adults.

Of the 182 cases of tonsillectomy, post-operative follow-ups were simple in 178 patients or 97.8%.

Apart from the pain which was felt in most of the patients, there were 4 cases of postoperative hemorrhage which were all reported in group A, including two cases occurring on the 4th and 5th day postoperative in two children. and who spontaneously dried up and two others occurred on the 8th and 10th postoperative day and required a resumption of surgery with hemostasis in the operating room under general anesthesia.

The relationship between postoperative hemorrhage and diet was statistically significant with a value of $p = 0.007$ (less than 0.05).

Pharyngeal pain radiating to the ear regions has been seen in most patients. They were moderate in most patients (Figure 1) and increased during the first 3 postoperative days, then gradually diminished and disappeared after a week.

The pain in group A patients was prolonged compared to group B despite the same analgesic therapeutic course prescribed in all patients according to age and weight.

The calculation of the value P found a value at $p = 0.47$ (greater than 0.05).

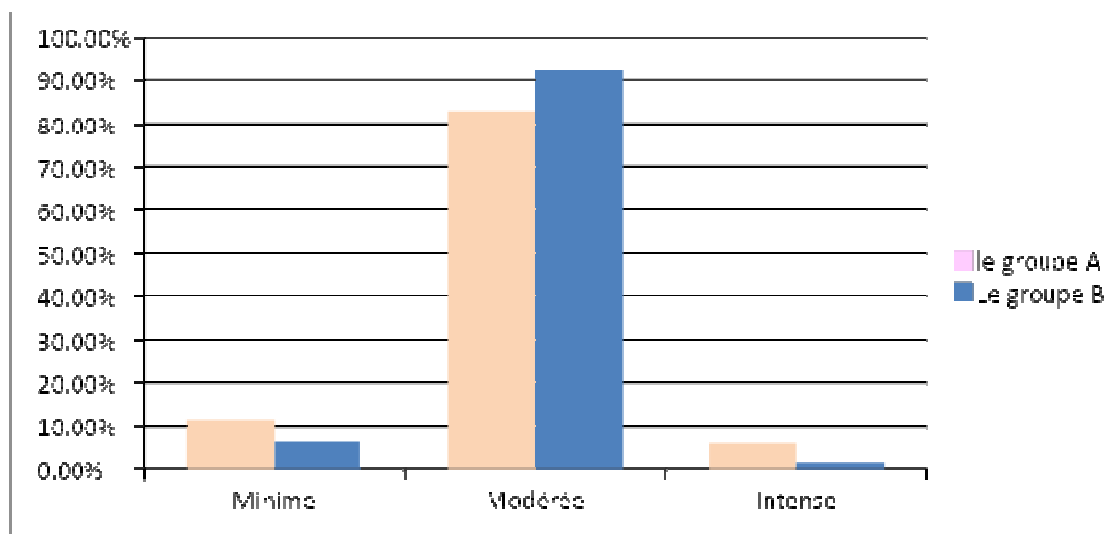


Figure 1: the distribution of pain intensity in each group.

Discussion

Haemorrhage after a tonsillectomy is a frequent and dreaded complication since the tonsils are richly vascularized and no pharyngeal wound cover is possible. Hemorrhage is the most frequent primary postoperative complication [4], with a prevalence that varies widely in the literature and figures ranging from 0.1 to more than 20% [5–6].

In ambulatory surgery as in conventional surgery, the risk of early bleeding after tonsillectomy is low, varying according to studies between 0.6 and 3% [7]. In our study, a rate of 2.2% was noted. This rate concerns early bleeding (before the eighth hour), and late bleeding (in the first 24 hours). This risk varies from one team to another, and is influenced by several factors including the surgical technique, the treatments used to control post-operative pain, and the recommended diet.

The technique adopted by our team was that of dissecting tonsillectomy for all patients. this technique, compared to other techniques, has a lower risk of hemorrhagic complications, both in immediate and late consequences, in particular when pressure ulcers fall on D12 [8].

The type of diet followed by patients after a tonsillectomy, in terms of content and frequency of consumption, could influence the risk of postoperative hemorrhage [9].

Aside from hemostasis abnormalities, it is difficult to identify risk factors for hemorrhage. Late hemorrhage due to pressure ulcers most often occurs around the fifth postoperative day, but can be observed until the twentieth day [10]. According to Guida, the incidence of hemorrhage ranges from 0.1% to 3.2% [10].

A previous randomized trial had not shown any significant difference between the different regimes on the rate of postoperative hemorrhage in adults [11].

The results of a systematic review published by Miles Bannister in 2017 did not show any significant relationship between the risk of bleeding and the diet adopted post-operatively whether the latter is restricted or not [9].

Early resumption of a diet is encouraged after tonsillectomy, the mechanism by which this can prevent postoperative hemorrhage is unclear [9].

Zagólski studied the dietary restriction following a tonsillectomy and indicated that the rate of hemorrhage in post tonsillectomy was significantly higher when the patients were limited to a soft diet for 14 days after surgery, compared to those whose consistency food was not limited (9.7% versus 0%) [12]. According to another randomized study by Tabee et al. In 2006, the risk of hemorrhage was lower with a restricted diet [13]. According to other authors, the benefit of a fluid diet in controlling the risk of post-tonsillectomy hemorrhage is indifferent [14, 15].

In our study we identified four cases of postoperative hemorrhage which were all noted in group A who received a restricted diet compared to 0 cases in the other group which was statistically significant ($p = 0.007$). The post-operative diet would therefore seem to have a role in the occurrence of hemorrhage in the post-operative consequences of a tonsillectomy. The role of diet in post tonsillectomy therefore remains to be proven by more in-depth studies.

Pain is an integral part of post-tonsillectomy operations, it is usually considered intense and can last up to 7-10 days [16].

Few studies in the literature objectively assess the impact of postoperative diet and physical activity recommendations on clinical recovery and postoperative pain. As a result, the instructions given by the ENT surgeon to his patient vary widely from one center to another and within the same center from one doctor to another [17]. However, the authors generally agree to encourage, for variable durations, a liquid or soft, non-spicy diet with avoidance of certain dairy products and lemon juice; and in our context bread.

In our study we noted a preponderance of moderate pain in both groups A and B. The pain was prolonged in patients of group A compared to group B despite the same analgesic therapeutic behavior prescribed in both groups. The value of P was at 0.47 greater than 0.05, therefore the relationship between the diet adopted postoperatively and the pain was statically insignificant.

In the study by Brodsky et al., The ratio of the benefit between the two diets is indifferent, these results join other studies, and which all conclude that the diet does not influence the occurrence of post-operative pain [14.15].

Prescribing a particular diet or restricting physical activity is indicated in the prevention of post-tonsillectomy hemorrhage, it has no effect on postoperative pain. It is recommended to encourage an early and regular resumption of food [17].

CONCLUSION:

In the light of our work and data from the literature, we could conclude that a diet rich in protein and without any restriction remains the best to adopt since it significantly reduces the risk of bleeding or at least it does not make it worse. This free diet does not intensify post-operative pain and ensures rapid resumption of school in children and professional activity in adults.

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