

**SURGICAL TREATMENT METHOD FOR HYPERTROPHY OF THE PALATINE  
TONSILS IN CHILDREN WITH IRON-DEFICIENCY ANEMIA****<sup>1</sup>Abdullaeva R. R. and <sup>2</sup>Ashurov A. M.**<sup>1</sup>Republican Multidisciplinary Children's Center of the Republic of Karakalpakstan, Nukus.<sup>2</sup>Center for Professional Development of Medical Workers, Tashkent.**\*Corresponding Author: Abdullaeva R. R.**

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**ABSTRACT**

The article presents the results of clinical studies of the proposed method of surgical treatment of adenoid vegetation, which allow expanding the indications for surgical treatment of this pathology and increase the effectiveness of treatment, reducing complications, duration of rehabilitation and hospital stay, which is economically beneficial.

**KEYWORDS:** Adenotomia, surgical treatment, hypertrophy of the palatine tonsils, in children, iron-deficiency anemia.

**RELEVANCE**

Surgical treatment of children with palatine tonsil pathology against the background of concomitant diseases is currently a relevant problem. Firstly, because adenotomia is the most common operation in pediatric otolaryngology<sup>[5,8]</sup>, and secondly, because in recent years there has been a steady increase in concomitant diseases in children.<sup>[1,9]</sup> Concomitant diseases can sometimes be a contraindication for adenotomia.<sup>[4,6]</sup> One such comorbid disease is widely spread among children of the Republic of Karakalpakstan - iron-deficiency anemia (IDA). Adenotomia operation in IDA carries the risk of dangerous bleeding during the postoperative period<sup>[11]</sup>, and exacerbates the degree of anemia. Therefore, many ENT surgeons do not perform adenotomia surgery until the concentration of hemoglobin in the blood is normalized. This is a very difficult and time-consuming task for the hematologist, sometimes impossible to achieve. And children suffer from chronic hypoxia, various interrelated pathological processes begin in the body (lagging behind in growth, mental development, lung pathology, bite disorders, etc.).<sup>[2,3,7]</sup>

Currently, there is an obvious need for the development of a unified algorithm for the examination and treatment of children with palatine tonsil pathology and IDA. Given the widespread prevalence of both lymphoepithelial ring pathologies and IDA in the Republic of Karakalpakstan, this algorithm should be acceptable for use in regional healthcare facilities.

Hypertrophy of the palatine tonsils of 2-3 degrees is treated surgically. In cases where surgery is

contraindicated, conservative treatment is recommended. Conservative treatment of hypertrophy of the palatine tonsils involves periodic use of drugs that strengthen blood vessels, local injection of binding and resorptive drugs, physiotherapeutic procedures that lead to a reduction in adenoid tissue.

Contraindications for adenotomia surgery include acute inflammatory diseases, chronic progressive diseases, disorders of blood coagulation and anemia. In the literature, we did not find any forms or degrees that are contraindications for adenotomia surgery.

Thus, in practical otolaryngology, there is currently no consensus on which tactics to follow regarding adenoids in IDA. The lack of unified standards for diagnosis and treatment leads to the fact that the choice of treatment method depends on which specialist the patient is under the care of.<sup>[10]</sup>

**Goal:** To develop an optimal method for surgical treatment of palatine tonsil hypertrophy in children with IDA.

**MATERIALS AND METHODS**

Diagnosis of palatine tonsil hypertrophy (adenoid vegetation) was carried out using standard research methods. The gold standard for diagnosing adenoid hypertrophy is endoscopy of the nasal cavity and nasopharynx. The advantage of this modern method is undeniable compared to outdated methods such as posterior rhinoscopy and digital examination. X-rays, CT

scans, and MRI of the nasopharynx were performed as indicated.

There are three degrees of adenoid vegetation, with the first degree being treated with medication and the second and third degrees requiring surgery - adenotomia. The general condition of the body (the presence of acute and chronic somatic diseases, laboratory blood, urine and other indicators) is taken into account.

Children with 2-3 degree hypertrophy of the palatine tonsils and IDA were divided into groups based on the degree of IDA: Patients were divided into three groups according to IDA classification: the first control group consisted of children without IDA, the second group consisted of children with mild IDA (hemoglobin 90-120 g/l), and the third group consisted of children with moderate IDA (hemoglobin 70-89 g/l). Severe IDA, with hemoglobin levels below 70 g/l, was a contraindication for surgical treatment of palatine tonsil hypertrophy. Depending on the method of surgical intervention, all

children were also divided into three groups. The first group included children who underwent endoscopic adenotomia using a microdebrider (shaver), the second group included children who had adenoid tissue removed using an adenotome, and the third group included children who underwent adenotomia using a coagulator-adenotome of the "Photek" type. In all cases, the surgery was performed under general endotracheal anesthesia, and hemostasis was carried out using a coagulator after removal of the adenoid tissue.

Results of the study: Our work aimed to determine the safest surgical method for removing adenoid tissue, with the maximum bloodless or with minimal blood loss. During endoscopic examination, the condition of the adenoid tissue, its size, and the degree of enlargement can be well visualized and assessed.

To determine the amount of blood loss in each type of operation, the volume of blood collected during the operation was measured and recorded in Table 1.

**Table 1: Amount of blood loss with different surgical methods of adenotomia.**

	<b>Surgical Method</b>	<b>Average Blood Loss (ml)</b>
1.	Beckman Adenotome	20+5
2.	«Photek» Coagulator-Adenotome	12_+5
3.	Microdebrider	40_+5

As can be seen from Table 1, relatively high blood loss was observed when using the microdebrider, which may be due to the relatively longer duration of the operation compared to other adenotomia methods. In this case, as is known, the adenoid tissue is pulverized and mixed with blood. Therefore, before determining the volume of blood loss, the contents were passed through a sieve.

The correlation between blood loss and the degree of anemia was determined. The volume of blood loss was measured in each group, and in all groups, palatine tonsil hypertrophy was removed using a Beckman adenotome. The data are presented in Table 2.

**Table 2: Volume of blood loss depending on the degree of anemia.**

<b>N</b>	<b>Degree of IDA</b>	<b>Average Blood Loss (ml)</b>
1	Group I without IDA	19+5
2	Group I, Hb 90-120 g/l	20+5
3	Group II, Hb 70-89 g/l	22+5

The obtained data show that regardless of the degree of IDA, the volume of blood loss in all groups differed little. This indicates that in IDA with hemoglobin levels up to 80 g/l, the coagulation system is not a contraindication in this region. However, when analyzing blood coagulation, the results also differed little in all groups.

## CONCLUSION

For the treatment of children with 2-3 degree hypertrophy of the palatine tonsils and mild IDA (hemoglobin 90-120 g/l) and moderate IDA (hemoglobin 70-89 g/l), adenotomia using a Beckman adenotome and Photek coagulator-adenotome is recommended. Adenotomia using a microdebrider is not recommended for children with adenoid vegetation and moderate IDA (hemoglobin 70-89 g/l), as the operation is relatively

longer compared to other surgical methods, and the volume of blood loss is higher.

## LITERATURE REVIEW

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