Tonsillectomy in adult at Diyala province

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Abstract

Background: one of the surgical procedures that otolaryngologists do the most frequently is tonsillectomy. Although it's a very straightforward procedure, there is a significant risk of complications, including hemorrhage after surgery.

Aims of the study:to recognized the indications and complications of tonsillectomy in adult at Diyala province.

Methodology: cross sectional research that has been done from the 9th of October 2023 to the 7th of March 2024 in at BaqubahTeaching Hospital, Diyala. The study included50 adult patients who underwent tonsillectomy.

Results: mean age was (40.7±8.25), 10(20%) of the sample were 18-29 years

age group, 16(32%) of the sample were 30-39 years, 12(24%) of the sample were 40-49 years, 6(12%) of the sample were 50-59 years and 6(12%) of the sample were 60-69 years.19 (38%) of the sample were male while 31(62%) of the sample were female. 21(42%) of the sample were recurrent tonsils infections, 11(22%) of the sample were obstructive sleep apnea, 6(12%) of the sample were peritonsillar abscess, 5(10%) of the sample were persistent foul taste and breath, 4(8%) of the sample were enlarged tonsils causing

dysphagia, 3(6%) of the sample were unilateral tonsil hypertrophy. we found that 16(32%) of the sample were bleeding, 13(26%) of the sample were pain, 6(12%) of the sample were tongue and soft palate edema, 3(6%) of the sample were dehydration, while 12(24%) of the sample were without complications.

Conclusions: we conclude that there many indications for tonsillectomy in adults such as recurrent tonsils infections, obstructive sleep apnea, peritonsillar abscess, persistent foul taste and breath and other indications that represent few percentage. Bleeding is most common complications of tonsillectomy followed by pain.

Keywords: Tonsillectomy, Diyala.

Introduction

Tonsillectomy is one of the most common surgical procedures performed worldwide. Throughout history, there have been many different indications for tonsillectomy. Prior to the discovery of antibiotics, tonsillectomy was thought to be a very successful therapeutic method for treating tonsil infections and preventing their sequelae. In the US, 1.4 million tonsillectomies were performed by the year 1949 alone.(1)

This pattern persisted until the 1970s, when signs began to be doubted. As a result, there was a noticeable decline in tonsillectomies, from the approximately 2 million that were carried out yearly in the 1960s to the 400,000 that are now conducted in the USA.(2)

The Spanish Society of Otorhinolaryngology currently recommends tonsillectomy as the only option when tonsillarmalignancy, significant airway obstruction in the oropharynx due to tonsillar hypertrophy, or chronic tonsillar bleeding are present. Included are relative signs such recurring acute tonsillitis, chronic tonsillitis, and recurring phlegmon or peritonsillar abscess.(3,4)

Despite being a straightforward surgical procedure, there is a 5% to 7% chance of major problems that might put the patient's life in jeopardy.(5)

Pain—which is a natural side effect of tonsillectomy—bleeding (which can happen early if it happens within 24 hours or later), nausea, and vomiting are the most common problems and side effects, with bleeding being the most dangerous.(6,7,8)

There is disagreement over whether surgical indication and bleeding risk are related, but Seethaleret al. (9) and Roplekaret al. (10) appear to have higher bleeding incidences in patients whose initial diagnosis was recurrent tonsillitis, even though these associations are not always statistically significant. Rather, new research by Galindo et al.(11) indicates that the bleeding is more closely associated with a previous peritonsillar abscess.

In our service, patients often stay in the hospital for two days in order to quickly and effectively control difficulties in the early postoperative period.(12)

Aims of the study

The aims of the study was to recognized the indications and complications of tonsillectomy in adult at Diyala province.

Methodology

Cross sectional research that has been done from the 9th of October 2023 to the 7th of March 2024 in at BaqubahTeaching Hospital, Diyala. The study included50 adult patients who underwent tonsillectomy. All patients were evaluated using history full ENT examination and investigations.

Inclusion criteria

1-Their age above 18 years old

2-They do tonsillectomy during the time of study

3-They don’t have bleeding tendency condition.

Exclusion criteria

Patients bellow 18 years old were excluded from the study.

1-History

This was taken with a survey containing a thorough medical history, including the patient's complaint, its duration, how often the sore throat occurs, the symptoms associated with each attack (fever, odynophagia, appetite loss, generalized weakness, and the length of each attach), snoring, postnasal discharge, nasal obstruction, sleep disturbance, halitosis, lump sensation in the throat, and weight loss.

Patients were also questioned about signs and symptoms of bleeding tendency, such as epistaxis, excessive bleeding following trauma, wounds, tooth extractions, or male circumcisions, or spontaneous bruises or ecchymosis, as well as family history of bleeding disorders and drug history, all of which could have an impact on the patient's condition. Inquiries into the patients' prior surgical and medical histories were also made.

2-Examination

A thorough ENT examination was performed, paying particular attention to the tonsils and their asymmetry, the neck with cervical lymphadenopathy, the nose, the oropharynx, and the post-nasal region using an endoscope or mirror.

3-Investigations

Every patient is sent for an ECG, chest X-ray, bleeding time, clotting time, prothrombin time, partial thromboplastin time, hemoglobin evaluation, and blood type. In advance of general anesthesia, certain patients want further investigation based on their condition.

4- Intra-operative

Under general anesthesia, cuff endotracheal intubation was used for tonsillectomies. Tonsils were removed using the dissection technique. Hemostasis maintained with electrocautery or silk ligation

5-Post-operative assessment and follow up

Following surgery, the patient was evaluated for the existence of any complications, including but not limited to bleeding, airway obstruction, severe discomfort, dehydration, uvular edema, and other related issues. Patients often spend less than 24 hours in the hospital, and they are monitored for a month after that. Postoperative antibiotics were administered to all patients, including amoxicillin. In cases where a patient had a penicillin allergy, erythromycin or clindamycin were administered. Additionally, postoperative analgesia was administered to all patients.

Statistical analyses

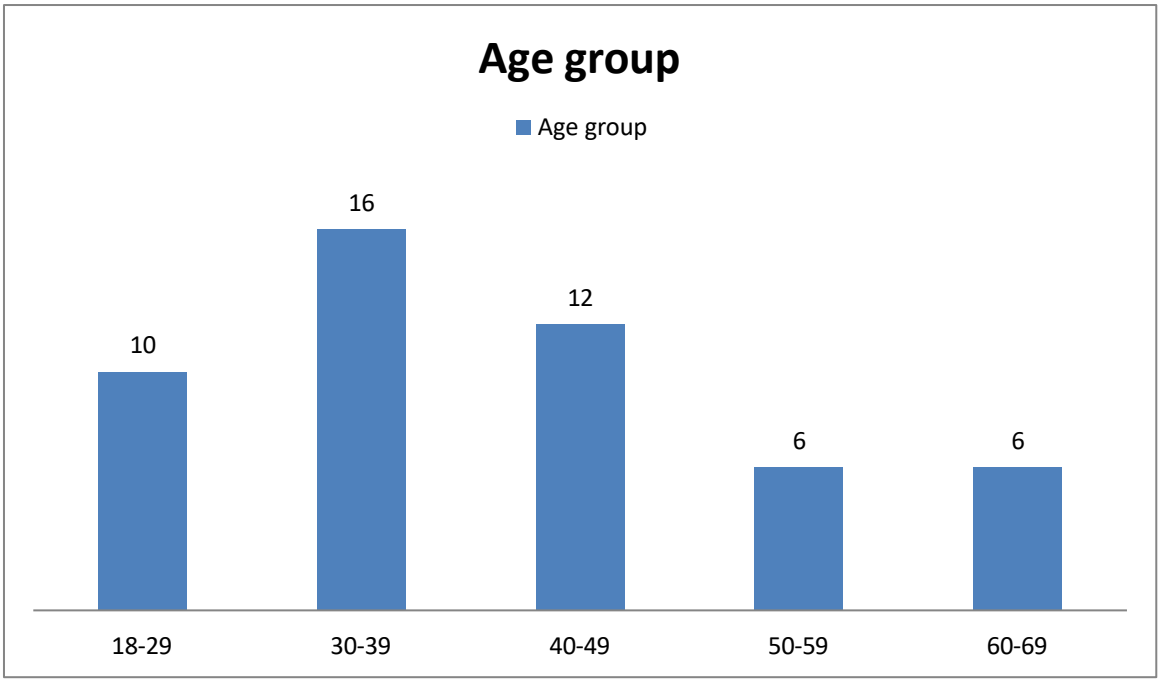
Data analysis was done using the available statistical package, SPSS-27 (Statistical Packages for Social Sciences, version 27). Data were analyzed through a descriptive statistical approach (frequency, percentage, mean, tables, pies, and bar charts).

Result

Data were collected from 50 patients with tonsillectomy as sample, mean age was (40.7±8.25), 10(20%) of the sample were 18-29 years age group, 16(32%) of the sample were 30-39 years, 12(24%) of the sample were 40-49 years, 6(12%) of the sample were 50-59 years and 6(12%) of the sample were 60-69 years as shown in table 1.

Table (1): Distribution of age group among the sample.

Age group	Patients number	Percentage
18-29years	10	20%
30-39years	16	32%
40-49 years	12	24%
50-59 years	6	12%
60-69 years	6	12%



About the gender, 19(38%) of the sample were male while 31(62%) of the sample were female as shown in table 2.

Table (2): Gender distribution among included sample.

Gender	Patients number	Percentage
Male	19	38%
Female	31	62%

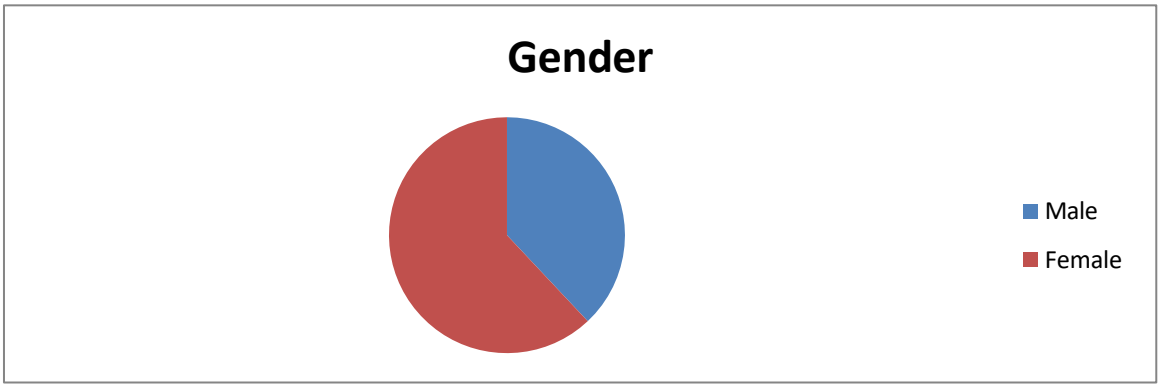


Table 3 show the indications of tonsillectomy, 21(42%) of the sample were recurrent tonsils infections, 11(22%) of the sample were obstructive sleep apnea, 6(12%) of the sample were peritonsillar abscess, 5(10%) of the sample were persistent foul taste and breath, 4(8%) of the sample were enlarged tonsils causing dysphagia, 3(6%) of the sample were unilateral tonsil hypertrophy as shown in table 3.

Table (3): distribution of sample according to indication of tonsillectomy.

Indications	Patients number	Percentage
Recurrent tonsils infections	21	42%
Obstructive sleep apnea	11	22%
Peritonsillar abscess	6	12%
Persistent foul taste and breath	5	10%
Enlarged tonsil causing dysphagia	4	8%
Unilateral tonsil hypertrophy	3	6%

About the complications, we found that 16(32%) of the sample were bleeding, 13(26%) of the sample were pain, 6(12%) of the sample were tongue and soft palate edema, 3(6%) of the sample were dehydration, while 12(24%) of the sample were without complications as shown in table 4.

Table(4) : Distribution of complications according to the sample.

Complications	Patients number	Percentage
Bleeding	16	32%
Pain	13	26%
Tongue and soft palate edema	6	12%
Dehydration	3	6%
No complication	12	24%

Discussion

The study's findings demonstrated that women were more likely than men to have tonsillectomy. These findings are agree with a research conducted in Denmark between 2001 and 2011, which found that adult female patients had a greater cumulative risk of tonsillectomy than adult male patients.(13)

In our study, we found that 30-39 years age group is highest incidence of tonsillectomy followed by 40-49 years age group and the mean age was 40.7 years. This disagree with study which found that At the time of surgery, the patient's mean age was 27.03 years, with a 18-year-old minimum and a 76-year-old maximum.(14)

We found that there were many indications for tonsillectomy in adults such as recurrent tonsils infections, obstructive sleep apnea, peritonsillar abscess, persistent foul taste and breath and other indications that represent few percentage.

A study done by Hoddesonet al.(15) found that Patients with a history of chronic infection (n = 207; 57%), upper airway obstruction (n = 98; 27%), and probable tumor (16%) were the reasons for tonsillectomy.

Other study done by Randall*et al.(*16) found that in rare instances of airway blockage brought on by an acute infection or when cancer is suspected, tonsillectomy is advised. Rare instances of obstructive sleep apnea, refractory halitosis due to tonsillar crypt stones, and other chronic, recurring infections resistant to conventional therapies are other potential indicators. In the case of a streptococcal carrier condition, tonsillectomy is not recommended.

Study done byWei *et al*.(17) found that Recurrent tonsillitis was the most common indication, occurring 74.85% (244) of the time.

We found that bleeding is most common complications followed by pain. Other complications which represent little percentage and less frequency include tongue and soft palate edema and dehydration. About one- third of the patients were without complications.

Brigger*et al*.(18) found that In 5.21% (17) of the tonsillectomies, bleeding was the most common complication, necessitating surgical revision in 13 out of the 17 patients. Patients who had their tonsil pillars sutured had no statistically significant variations in their risk of bleeding as compared to those who did not.

Other study done byGallagher *et al.*(19) found that Within 14 days following surgery, 6% had treatment for postoperative bleeding, 2% for dehydration, and 11% for ENT discomfort. Complications were substantially more likely to occur in patients with comorbidities, prior peritonsillar abscess, or a higher number of antibiotic prescriptions written in the previous year.

Conclusion

We conclude that there many indications for tonsillectomy in adults such as recurrent tonsils infections, obstructive sleep apnea, peritonsillar abscess, persistent foul taste and breath and other indications that represent few percentage. Bleeding is most common complication of tonsillectomy followed by pain.

Recommendations

1-Further studies are needed to set recommendations in the management of adults tonsillectomies in the future with more samples size.

2- Make follow up to patients underwent tonsillectomy to prevent complications.