

The clinical behavior of Inverted papilloma at Chulalongkorn Hospital

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Objective : *To study clinical behavior of Inverted papilloma at Chulalongkorn for diagnosis and treatment.*

Design : *Retrospective study.*

Setting : *Otolaryngology department, Faculty of Medicine, Chulalongkorn University.*

Result : *Between January 1985 and June 1995, 19 patients with inverted papilloma of the nasal cavity were treated at Otolaryngology department, Chulalongkorn Hospital. The patient's age range were between 34-80 years old, with the mean of 55 years old. Incidence in male and female were not significantly different and the most common symptom was nasal obstruction. Current surgical approach is lateral rhinotomy with medial maxillectomy to prevent recurrence.*

Conclusion: *The most common presenting symptom of inverted papilloma was nasal obstruction from nasal mass, and mass originate from the lateral nasal wall. Current therapy were treated by medial maxillectomy via lateral rhinotomy or sublabial approach.*

Key words : *Inverted papilloma, Clinical behavior.*

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วัตถุประสงค์ : เพื่อศึกษาลักษณะทางคลินิกของเนื้องอกในโพรงจมูกชนิด *Inverted papilloma* ในโรงพยาบาลจุฬาลงกรณ์ เพื่อการวินิจฉัย และรักษาต่อไป

รูปแบบการวิจัย : การศึกษาชนิดย้อนไปข้างหลัง

สถานที่ : ภาควิชาโสต นาสิก ลาริงซ์วิทยา คณะแพทยศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

ผลการศึกษา : มีผู้ป่วยจำนวนทั้งสิ้น 19 คน ที่ได้รับการวินิจฉัยว่าเป็นโรคเนื้องอกในโพรงจมูกชนิด *Inverted papilloma* ในช่วงระหว่างเดือนมกราคม พ.ศ. 2528 ถึงเดือนมิถุนายน พ.ศ. 2538 เป็นเวลา 10 ปี โดยอายุของผู้ป่วยอยู่ในช่วง 34-80 ปี อายุเฉลี่ย 55 ปี พบทั้งเพศชายและเพศหญิงเท่าๆ กัน โดยอาการส่วนใหญ่ผู้ป่วยจะมาด้วยโพรงจมูกอุดตัน การรักษาโดยวิธีการผ่าตัดด้วยการทำ *Medial Maxillectomy* สามารถป้องกันการกลับมาเป็นซ้ำของโรคได้ในปัจจุบัน

สรุป : อาการส่วนใหญ่ของผู้ป่วยโรคเนื้องอกในโพรงจมูกชนิด *Inverted papilloma* นี้คือ โพรงจมูกอุดตันจากเนื้องอกซึ่งมาจากผนังจมูกด้านข้าง วิธีการในปัจจุบันโดยการทำผ่าตัด *Medial Maxillectomy* โดยเข้าทาง *lateral rhinotomy* หรือ *sublabial approach*.

Inverted papilloma of the nose was first described by Ward in 1854 and Billroth in 1855⁽¹⁾ in 1854 and 1855, respectively. It was classified as a true nasal neoplasm in 1935 by Kramer and Som,⁽²⁾ who described it as a true papilloma distinguished from inflammatory nasal polyps. Shortly after there, Ringert⁽³⁾ described the propensity of this lesion for locally invasive growth in his excellent article on malignancies of the nose.

Despite these early reports, this lesion has been referred to by many different names, including villiform cancer, Schneiderian papilloma, inverting papilloma, Ewings papilloma, transitional cell papilloma, cylindrical cell papilloma and papilloma sinusitis.⁽⁵⁾ This diversity in non-enclature has reflected, in part, a misunderstanding of this tumor's behavior. This behavior has become more clear during the past 25 years and the nomenclature has thus become more unified. Today, the most generally accepted terminology is inverting or inverted papilloma.⁽⁴⁾

Material and Method

This was a ten year (January 1985 - June 1995) retrospective study of 19 patients with inverted papilloma of the nasal cavity who were treated at the Otolaryngology Department of Chulalongkorn Hospital. In 18 patients masses in nasal cavities were biopsied and diagnosis was made before definite surgeries were carried out. One patient had biopsy via the sublabial incision.

Results

Age and Sex

Among the 19 patients were 9 men, 10 were women. The patient's age range was between 34-80 years old; with the mean of 55 years old. The peak incidence of occurrence was in the fifth and sixth decades of life. (Table 1)

Signs and Symptoms

The most common presentation was nasal obstruction 78.9% (15 cases) follow by nasal mass 15.7% (3 cases) (Table 2) and epistaxis 5.2% (1 cases). The presence of the tumor on the left and right sides was 12:7. All cases had a unitateral nasal mass. Duration of symptom is between half a month and 13 years average 3 years.

In 18 patients masses in nasal cavities originated from lateral nasal wall. One patient mass originated in maxillary sinus. Gross appearance of nasal mass 73% (14 cases) were whitish mass. Pink-red mass were 21% (4 cases) (Table 3.).

Treatment

Fourteen (73%) of the patients were treated by medial maxillectomy. Eight (42%) of these used a lateral rhinotomy approach and Sublabial approach in 6 cases (31%), a partial maxillectomy and ethmoidectomy was used in 2 cases. Excision mass for small lesion 2 cases and right middle turbinectomy with right anterior half inferior turbinectomy 1 case. (Table 4)

Table 1. Number of patients age range.

Age (years old)	Patient (n)
30+	3
40+	4
50+	5
60+	5
70+	1
80+	1

Table 2. Number of patient's sign and symptom.

Signs and Symptoms	Patient (n)	%
Nasal obstruction	15	78.9
Nasal mass	3	15.7
Epitaxis	1	5.2
Total	19	100

Table 3. Clinical finding of nasal mass.

Nasal Mass	Patient (n)	%
Whitish	14	73
Pink-red	4	21

Table 4. Surgical method.

Surgical Method	Patient (n)	%
Medial Maxillectomy		
- Lateral rhinotomy	8	42
- Sublabial	6	31
Mass excision	2	13.3
Partial maxillectomy and ethmoidectomy	2	13.3
Rt. middle turbinectomy and anterior half inferior turbinectomy	1	5.2

Recurrence and complication

One case (5.2%) recurred within a year postoperatively. Two cases were associated with malignancy (13.3%), one case of malignancy change was squamous cell carcinoma with in 1 year and another one was esthesioneuroblastoma in 5 years after diagnosis. Post operative complication had one case by developed a nasolacrimal duct obstruction within 1 year.

Discussion

In this retrospective study of 19 cases of inverted papilloma of nasal cavity were treated at Chulalongkorn Hospital there was no significantly different occurrence rate between men and women but in previous series it was reported to be more common in men.⁽⁴⁾ The average age of patients was 55 years old. And the peak incidence of occurrence was in the fifth and sixth decades of life. Unilateral nasal obstruction was the most common presentation in this study. The most common site of origin of the

lesion was the lateral nasal wall and one case involved sinus was maxillary sinus, bilateral nasal involvement was not found.

Malignancy was associated with inverted papilloma in about 10.4% of such patients at Chulalongkorn Hospital like the previous study^(5,8) Inverted papilloma should be treated by medial maxillectomy via lateral rhinotomy or sublabial approach. The recurrent rate of patients who underwent this procedure was 5.2% (1 case). Transnasal operation associated with a high recurrence rate and should be avoided except early detect a small single tumor at visualized site in nasal cavity are presenting.

Medial maxillectomy via lateral rhinotomy or sublabial approach are treatment of choice for remove tumor^(6,7), lateral rhinotomy provides better exposure than sublabial, especially for tumors extending to the roof of the nose, but a sublabial approach provides better cosmetic results than a lateral rhinotomy approach for medial maxillectomy procedure.

References

1. Perry Phillips P. The clinical behavior of Inverting papilloma of the nose and paranasal sinus, *Laryngoscope* 1990 May;100
2. Kramer R, Som ML. True papilloma of the nasal cavity, *arch. Otolaryngology* 1935 ;22: 22-43
3. Ringertz N. Pathology of Malignancy tumor arising in the nasal cavity and paranasal cavities, *Arch Otolaryngology* 1938 (Stockh) [Suppl], 27: 31-42
4. Yosef P. Krespi, Levine TM. Tumors of the nose and paranasal sinus. In: Micheal M. Paparella, ed. *Otolaryngology Vol. 3 Philadelphia: W.B. Saunders, 1991. 1935-8*
5. Lawrence W. Desanto, Neoplasm of nose. In: Cummings CW, ed. *Otolaryngology Head and Neck Surgery Vol.1. St. Louis: Mosby-Year Book, 1993. 754-64*
6. Biller HF. Inverting papilloma. In: George A. Gates, ed. *Current therapy in Otolaryngology Head and Neck Surgery fifth edition St. Louis: Mosby-year Book, 1994. 398-400*
7. Miller RH. Neoplasms of the nose and paranasal sinuses. In: Ballenger JJ, ed. *Disease of the nose, throat, Ear, Head and Neck Vol 1. Pennsylvania: Lea & Febiger, 1991. 209-19*
8. Feldman BA. The nose and sinuses. In: Lee KJ, ed. *Essential Otolaryngology sixth edition. Connecticut: Appleton & Lange, 1995. 715-56*