

CLINICAL STUDY OF LARYNGEAL CYSTS

A. P. SINGH
U. PRASAD

SUMMARY

This paper describes eight cases of successfully treated laryngeal cysts in different age groups with varying presentation problems.

INTRODUCTION

Cysts in the larynx are one of the least encountered benign laryngeal lesions. However, Myerson¹ claimed that laryngeal cysts occurred more frequently than described in the text books. Singh and Malik² had reported five cases which were diagnosed during a five years period. The present paper deals with eight cases of cysts of the larynx in different age groups with varying presenting problems treated satisfactorily during an eight year period at the University Hospital, Kuala Lumpur, Malaysia.

DISCUSSION

The occurrence of cysts in the larynx is infrequent, as examination of records of this hospital over an eight year period revealed only eight cases. The rarity of such a lesion has also been claimed by Myerson¹ and Singh and Malik.² It is

an established fact that cysts of the larynx may remain asymptomatic for a long time and are usually diagnosed on routine examination. This can be one of the contributory factors, why cases are not encountered.

As for age, five of the eight cases occurred in the third or fourth decade of life. However, the youngest patient was a one-year-old child and the oldest was fifty-four years. This was in conformity with the statement of Myerson¹ but contradictory to the observations of Singh and Malik,² who claimed that 60 percent of cases were to be found among elderly persons. Such varying results itself reflect that the condition can occur at any age as also claimed by Asherson.³ Laryngeal cysts have been reported to be more predominant among males (Ullrich 1887, as quoted by Myerson¹) and seven of the eight cases in our series were males.

Asherson³ reported that this condition was usually symptomless, whereas in our series, none of the cases were found to be asymptomatic although the presenting symptoms were from mild to severe in nature. The cases with mild symptoms might have been labelled as asymptomatic by earlier authors but this cannot be so, as we observed that the milder the symptom the more persistent it had been. Most of the five cases in the present series presented with a lump in the throat, followed by irritation of the throat (two cases), dysphagia, difficulty in breathing and recurrent sore throat (one case each). Such symptomatology is well known and widely accepted. Congenital cysts of the larynx may produce symptoms at any time from birth to adulthood.⁴ A similar observation was made in one of our cases which presented with difficulty in breathing within few months of life.

A P Singh, MS, DLO
U Prasad, FRCS, FICS
Department of Otorhinolaryngology,
Faculty of Medicine,
University of Malaya,
Kuala Lumpur.
Correspondence to:
Dr. A. P. Singh,
B 976 Sector A
Mahanagar
Lucknow, India.

CASE REPORTS

| S/No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-------------------------|--|---|---|----------------------|----------------------------|---|---|--|
| Age | 23 years | 54 years | 37 years | 34 years | 22 years | 26 years | 1 year | 42 years |
| Sex | Female | Male | Male | Male | Male | Male | Male | Male |
| Complaints with | Lump in throat | Dysphagia 2 months | Irritation of throat | Irritation of throat | Lump in throat | Lump in throat | Difficulty in breathing | Recurrent sore throat |
| Duration | 4 months | | Lump in throat Hoarseness 4 years | 2 years | 2 years | 6 years | for many months | 1 year |
| Site of Lesions | Vallecula (Laryngeal surface of epiglottis) (Figs. 2, 3 and 4) | Vallecula (Laryngeal surface of epiglottis) | Vallecula (Laryngeal surface of epiglottis) | Aryepiglottic fold | Vallecula (Base of tongue) | Vallecula (Laryngeal surface of epiglottis) | Vallecula (Base of tongue) | Vallecula (Laryngeal surface of epiglottis + Pharyngo-epiglottic folds |
| No. of Lesions | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 4 |
| Side of Lesions | Right | Left | Right | Left | Left | Left | Middle | Both sides |
| Sessile or Pedunculated | Pedunculated | Sessile | Pedunculated | Pedunculated | Pedunculated | Pedunculated | Sessile | Sessile (2) + Pedunculated (2) |
| Appearance of Lesions | Yellowish blood vessels running over it | Typical appearance | Typical appearance | Typical appearance | Typical appearance | Typical appearance | Smooth Pinkish in colour | Smooth Pinkish in colour |
| Lobulated | - | - | - | Lobulated | - | - | - | - |
| Palpation | Cystic | Cystic | Cystic | Cystic | Cystic | Cystic | Firm Cystic | Cystic Mobile |
| Findings | Mobile | Fixed | Mobile | Mobile | Mobile | Mobile | Fixed | (2) Fixed (2) |
| Investigation | - | - | - | - | - | - | Direct Laryngoscopy under general anaesthesia | - |
| Diagnosis | Cyst Larynx | - | - | - | - | - | - | - |
| Treatment | Removal | Marsupialization | Removal | Removal | Removal | Removal | Marsupialization | Removal |
| Per Orally | Per orally + | + Cauterisation of Base | Per orally + | Per orally + | Per orally + | Per orally + | + Cauterisation of Base | Per orally + |
| Histology | Retention Cyst | Retention Cyst | Retention Cyst | Retention Cyst | Dermoid Cyst | Retention Cyst | Retention Cyst | Retention Cyst |
| Follow-up | 2 years | 3 years | 3 years | 7 years | 7 years | 2 years | Few months | Few weeks |
| | No recurrence | No recurrence | No recurrence | No recurrence | No recurrence | No recurrence | No recurrence | No recurrence |
| Remarks | - | - | - | - | - | - | Developed Phaume-thorax while on the operating table Managed Satisfactorily | - |



Fig. 1 Lateral X-ray neck showing soft tissue shadow (cyst) in the region of posterior one-third of the tongue, reducing the airway.

Laryngeal cysts are known to arise from any part of the larynx, the lingual surface of the epiglottis being the commonest site.^{1,5} In five of the eight cases, the cyst arose only from this site. Other uncommon sites noted were the base of the tongue (two cases) and the aryepiglottic fold (one case). These other less common sites have also been previously reported by Rollin and Schmidt⁶ and Myerson.¹

Other aspects of laryngeal cysts were also studied as regards their frequency, appearance and mode of attachment. Out of eight cases, six were pedunculated whereas the remaining two were sessile. In both these cases the cyst arose from the posterior one third of the tongue. Others⁷ have also mentioned sessile laryngeal cysts. Multiple cysts ranging from two to five in numbers were observed in two of our cases only. The appearance was characteristic on indirect laryngoscopic examination in almost all cases. The cyst appeared tense, shiny and yellow with blood vessels displayed prominently over it. However, in one case, where it was sessile and arose from the base of the tongue in

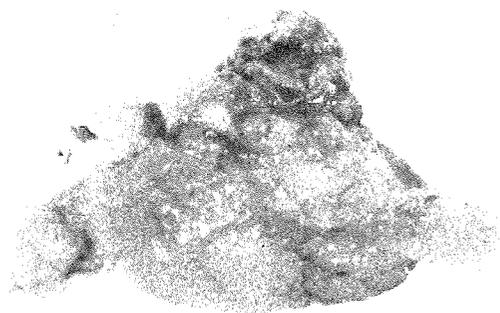


Fig. 2 Excised cyst from the epiglottis.

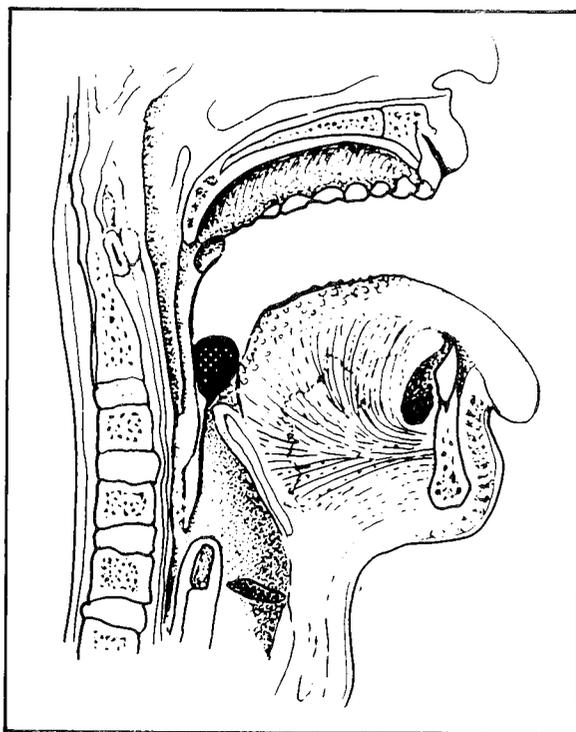


Fig. 3 Illustration showing laryngeal cyst arising from lingual surface of epiglottis.

an infant, the diagnosis could be made only after direct laryngoscopic examination. Lateral view X-ray of the neck was also helpful in localising the lesion (Fig. 1).

All cases were treated successfully

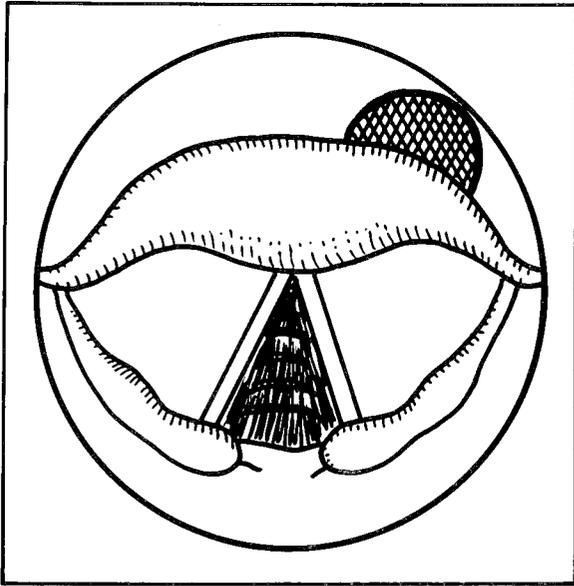


Fig. 4 Location of cyst on indirect laryngoscopic examination.

endoscopically. This procedure has also been earlier described and claimed as the best method.^{2,4,6} At the same time some authors^{2,4,6} also pointed out that if the need arises one should not hesitate to adopt an external approach especially in adults. However, Van de Water⁴ described an external approach in infants in one of his cases. The endoscopic approach was found to be easier for removing pedunculated cysts. Marsupialization was the effective method for sessile cysts. The base of the cyst or the remaining part of the capsule of the cyst was always cauterised. This procedure was found to be satisfactory since no recurrence was noted even after a long follow up.

Clinically and histologically the cysts (two cases) which arose from the base of tongue were thick walled whereas those from other sites were always thin walled. Histologically the laryngeal cysts are by and large retention cysts except in one where it was labelled as a dermoid cyst, this was the case where the cyst was single, sessile and arising from the base of the tongue (Case no. 5). In Algaba's⁵ series, eight of the nine cases were retention cysts.

ACKNOWLEDGEMENT

We are thankful to the Director, University Hospital, Kuala Lumpur for allowing us to publish the hospital records and to Mrs Lee, ENT Department for typing the manuscript.

REFERENCE

- ¹ Myerson M C (1933) Cysts of the Larynx. *Archives of Otorhinolaryngology*, 18, 281-290.
- ² Singh A P and Malik M K (1972) Cysts of the Larynx. *Journal of Otolaryngology*, 86, 383-386.
- ³ Asherson N (1957) Cysts of the Larynx. *Journal of Otolaryngology*, 71, 730-739.
- ⁴ Van de Water F W (1973) Laryngeal cysts - their surgical management. *Laryngoscope*, 83/8, 1185-1194.
- ⁵ Algaba J, Infante E and Moreva H (1974) Pre-epiglottic cysts. *Acta Otorhinolaryngology*, 25/3, 137-143.
- ⁶ Rollin H and Schmidt H (1976) The Laryngeal Cyst of the New Born. *LaryngoRhinol Otolgrenzged*, 55/5, 400-403.
- ⁷ John B Stewart (1975) Logan Turner's Disease of Nose, Throat and Ear 7th Edition P. 176.