

ORIGINAL ARTICLE

BILATERAL ABDUCTOR PARALYSIS VOCAL CORD LATERALISATION Vs ENDOSCOPIC ARYTENOIDECTOMY – OUR STUDY

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ABSTRACT: We are presenting a retrospective study in managing b/l abductor palsy in our hospital from 1986. From 1986 to 2006 we did vocal cord lateralisation in 54 patients and from 2006 we are doing endoscopic arytenoidectomy, so far 33 patients. We found endoscopic arytenoidectomy to be successful than vocal cord lateralisation in giving serviceable voice with no aspiration.

KEYWORDS: VOCAL CORD LATERALISATION, ENDOSCOPIC ARYTENOIDECTOMY, BILATERAL ABDUCTOR PALSY.

INTRODUCTION: Before 1922 there was no treatment for B/L abductor palsy and the patient had to live with tracheostomy lifelong. In 1982, Ejnell first did suture vocal cord lateralization. From 1986 we started doing vocal cord lateralisation. But the success rate was poor. From 2006, we started doing endoscopic arytenoidectomy following "Cumming's otorhinolaryngology head and neck surgery"

MATERIALS & METHODS:

	MALES	FEMALES	TOTAL
Vocal cord lateralisation	28	26	54
Endoscopic arytenoidectomy	19	14	33

Table 1: TOTAL NUMBER OF CASES

From 1986 to 2000 we did vocal cord lateralization. Combined external and internal approach used. 1-0/ 2-0 prolene used in all cases. Sutures was not removed at later date. Single layer used thereby preventing increased trauma to cord. Decanulation in following week in 2 layers after trial spigotting.

AGE (in years)	NUMBER OF PATIENTS	
	MALES	FEMALES
15-25	4	2
25-35	9	14
35-45	12	8
45-55	3	2

Table 2: AGE DISTRIBUTION IN VOCAL CORD LATERALISATION

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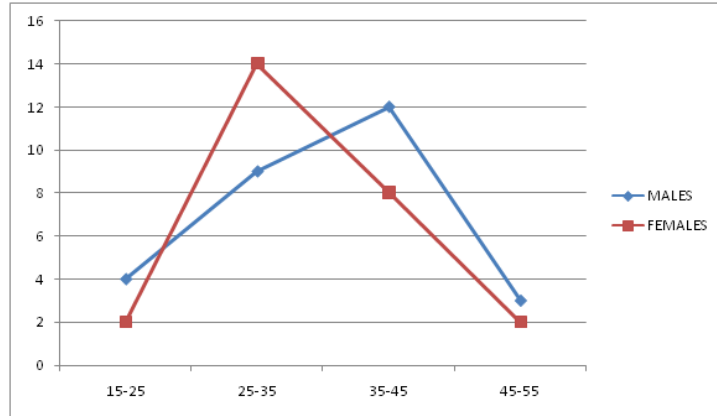


Fig. 1: AGE DISTRIBUTION IN VOCAL CORD LATERALISATION

From 2006 we started doing endoscopic arytenoidectomy. Incision made on overlying arytenoids cartilage. Arytenoid cartilage is separated and removed. Arytenoid bed cauterized. Vocal fold lateralization by cicatricial contraction. Patient decannulated in the following week after trial spigotting.

AGE(in years)	NUMBER OF CASES	
	MALES	FEMALES
15-25	6	2
25-35	5	7
35-45	6	3
45-55	2	2

Table 3: AGE DISTRIBUTION IN ENDOSCOPIC ARYTENOIDECTOMY

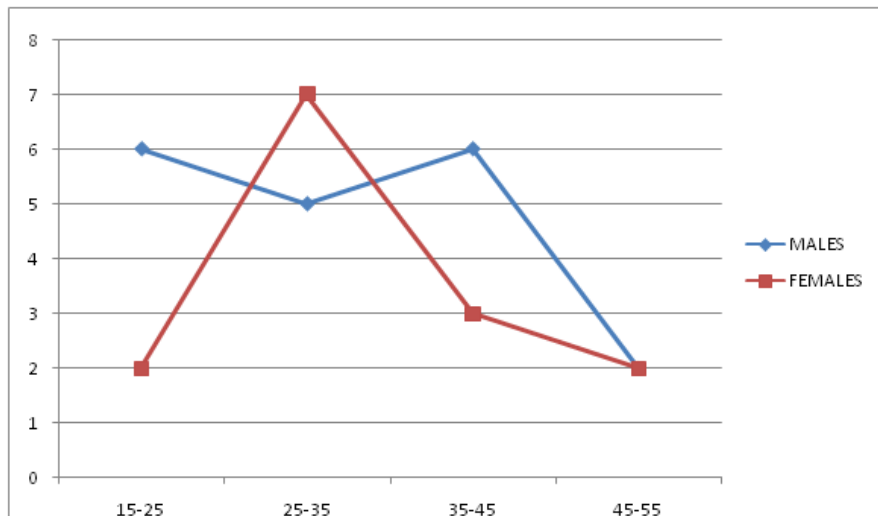


Fig. 2: AGE DISTRIBUTION IN ENDOSCOPIC ARYTENOIDECTOMY

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RESULTS: Of 54 cases of vocal cord lateralisation 28 were successful, 26 cases reported with noisy breathing/ aspiration and revision surgery was successful in only 5 patients.

AGE(in years)	SUCCESSFUL		UNSUCCESSFUL		REVISION SUCCESS	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
15-25	2	2	1	0	1	0
25-35	4	7	4	5	1	2
35-45	7	3	5	4	0	1
45-55	3	0	0	2	0	0
TOTAL	16	12	10	11	2	3

Table 4: VOCAL CORD LATERALISATION

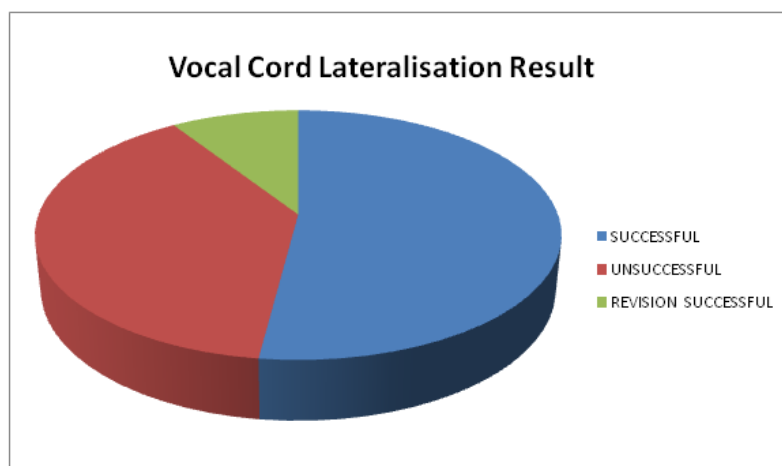


Fig. 3: vocal cord lateralization results

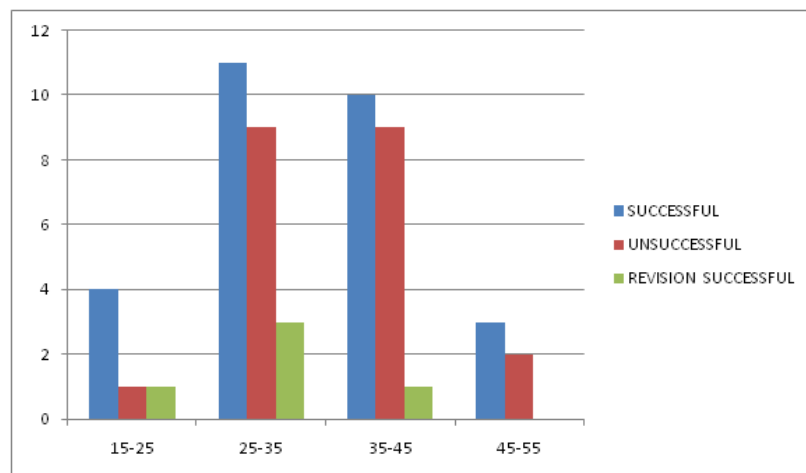


Fig. 4: vocal cord lateralisation age distribution results

Whereas all 33 endoscopic arytenoidectomy patients went free of aspiration & breathing difficulties.

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AGE(in years)	SUCCESSFUL CASES	
	MALES	FEMALES
15-25	6	2
25-35	5	7
35-45	6	3
45-55	2	2
TOTAL	19	14

Table 5: endoscopic arytenoidectomy result

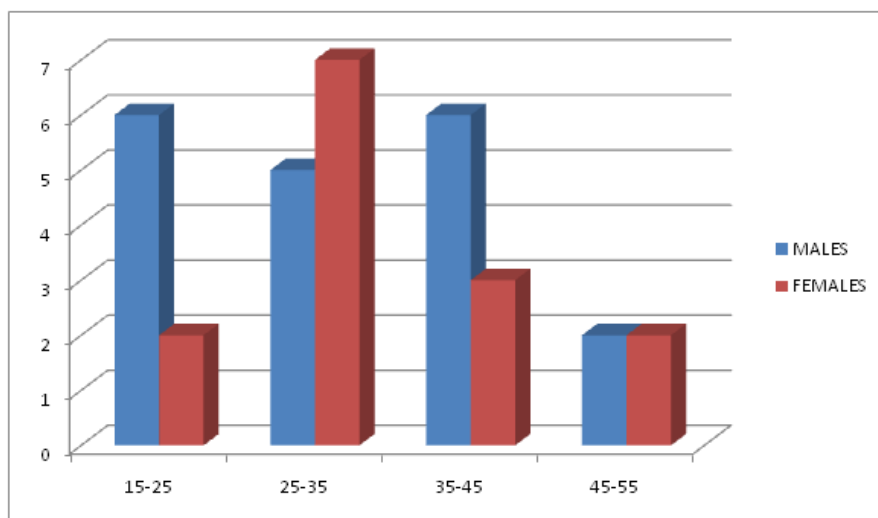


Fig. 5: ENDOSCOPIC ARYTENOIDECTOMY RESULTS

DISCUSSION: The success rate of vocal cord lateralisation is 51% (57% males & 42% females). 38% patients went for failure (47% males & 52% females). 9% (40% males & 60% females) patients successful revision surgery.

The success rate of endoscopic arytenoidectomy is 100%. Of which 2 cases were post vocal cord lateralization failure and 3 cases were post thyroidectomy b/l abductor palsy.

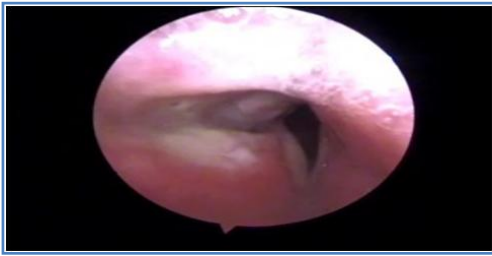
Vocal cord lateralization is technically more demanding. Needs practice and time. Failure rate was high. Aspiration is a problem. Incidence of perichondritis is less.

Endoscopic arytenoidectomy is simple technique. No external approach needed. No need for laser/coblator.



VOCAL CORD LATERALISATION

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ENDOSCOPIC ARYTENOIDECTOMY

REFERENCES:

1. Cumming's Otorhinolaryngology head & neck surgery.

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