Readers' Forum-10

Q.1 How will you treat a case of unilateral vocal cord palsy surgically ?

- A. Surgical management is reserved for those patients with uncompensated unilateral vocal cord palsy presenting with moderate to severe dysphonia or aphonia with or without aspiration. Patients where glottal and supraglottic compensation mechanisms are well established aided by speech therapy resulting in a normal voice or minimal dysphonia are best left in the hands of speech therapist.

Preoperative transnasal fiberoptic laryngoscopy and videostroboscopy are helpful in establishing the type and degree of glottal insufficiency and planning the appropriate surgical approach in individual cases. At this point it is important to determine whether the glottal chink is elliptical (arytenoids approximate posteriorly) or triangular (open posterior glottal chink) and the horizontal level of the affected cord (lower/same compared to the normal side). Videostroboscopy is useful in assessing the muscle tone (flaccid or normal) of the paralysed side.

Laryngeal Electromyography (EMG) plays a crucial role when the neural function of the affected side is not known. It provides good prognostic information about a possible return of motor function and leads to a more definitive policy rather than an ambiguous wait and watch. Normal EMG (no spontaneous electrical activity and normal recruitment) suggests return of function often weeks before visible movement of the affected side and in such cases surgical intervention is inappropriate. In cases where there is evidence of denervation, reduced recruitment or spontaneous activity in the absence of any voluntary function, permanent flaccid paralysis is likely and

phonosurgical procedures can be performed much earlier.

In patients with elliptical glottal defects (e.g. recurrent laryngeal nerve lesions) with poor prognosis of neural recovery confirmed by laryngeal EMG, I prefer Medialisation Laryngoplasty (Type 1 Issihiki's Thyroplasty Procedure) using a silastic implant; the implant is tailor made for individual patients to maximally medialise the apogee of the elliptical cord. In patients with a limited life span (e.g. carcinoma medialisation with autologous fat (not Teflon). Fat is harvested from the abdomen centrifuged filtered and loaded in the Brunning syringe for injection medialisation.

In cases where the paralysed vocal cord is at a different level and where the glottic chink is triangular (e.g. high vagal lesions) medialisation laryngoplasty alone often gives poor results, here I often combine this with an arytenoid adduction procedure overcorrecting the medialisation slightly as subsequent vocalis muscle atrophy may compromise the long term result.

Dr Abir K Bhattacharyya
South Woodford, London

- A. Injection of Collagene or fat in the vocal fold.

Dr Jean Abitbol
Paris, France

- A. In long standing unilateral vocal cord palsy with Paralytic Dysphonia I prefer to do Medialisation Laryngoplasty with silastic Implant with or without Arytenoid Adduction technique.

Dr V Phaniendra Kumar
Guntur.

- A. Surgical treatment is indicated only when there is aspiration or in cases refractory to

speech therapy. We advise speech therapy with straining exercises and adopt a policy of "watchful expectancy" for a period of 6 months, anticipating recovery from paralysis or compensation by cord. We encountered aspiration in unilateral cord paralysis in only 2 neurological cases, which were managed by a tracheostomy. Medialisation of the cord was done when indicated Thyroplasty by cartilage implantation as described by Isshiki.

Dr. D R Nayak
Dr Deepak Murthy K
Dr Balakrishnan R
Manipal

- A. I would like to do a Thyroplasty type I and medialise the paralysed vocal cord. In case the arytenoid is fixed, it can be dissected and also medialised.

Autologous fat injection needs to be considered as an alternative surgical procedure in these cases. A longer follow-up of the fate of the autologous fat is required. The results are promising because it imparts soft bulkiness to the vocal cord and retains the vibratory qualities and the problems of over-injection are minimised.

Dr Kamal S Parsram
Mumbai

- A. The operation of choice in my opinion is Thyroplasty I and SOS accompanied with Thyroplasty Type III.

Dr. R M Shah
Mumbai

- A. Unilateral vocal cord palsy of more than 1 year duration and of non malignant origin, not responding to an adequate trial of speech therapy is treated at our institute by Thyroplasty Type I—Surgical Medialisation of the vocal cord done under local anaesthesia with videoendoscopic control. The surgical technique used at our institute is as classically described by Prof. Isshiki.

We used various sizes and shapes of silastic blocks depending on the glottic defect. For a posterior glottic defect, arytenoid adduction should be performed in addition to vocal cord medialisation.

Illustrations :

Fig. 1

Figures 1. Patient with an adequate glottic chink after endoscopic lateralisation of one vocal cord.

Dr K K Ramalingam
Dr Ravi Ramalingam
Chennai

- A. a) Unilateral abductor palsy : If it is idiopathic, after adequate voice therapy, teflon paste injection is helpful for medialising the vocal cord from the paramedian position. The patient should be warned that the voice never become absolutely normal. Spontaneous recovery is extremely rare. Nevertheless, one should wait for at least six months before teflon injection. If the aetiology is lung cancer, as is often the case in left cord palsy, which is inoperable, teflon paste should be injected without delay since that would offer the patient a better voice for the short period he would be alive.

b) Unilateral adductor palsy ; one should wait for 6 months to 1 year for spontaneous recovery compensation by the opposite cord to take place. If the voice does not improve or improves slightly, teflon paste injection, thyroplasty or interposition of cartilage between the inner perichondrium and the thyroid ala improves voice. Whatsoever is done, voice does not become normal.

Dr P Ghosh
New Delhi

A. a) If the glottic chink is sufficient for phonatry needs and the patient lives within his respiratory reserve no surgery is needed. It is presumed that at least six months time has elapsed in idiopathic cases.

b) If the chink is sufficiently large and leads to breathy voice and the professional demands on the voice are heavy, some form of medialization procedure is needed.

1) Augmentation by injection adipose tissue or an inert substance like teflon paste.

2. Augmentation by Medialisation of the paralysed vocal cord by a Silastic implant through a Thyroplasty type I technique.

Dr D M Anklesaria
Mumbai

Q 2.How will you manage a case of spastic dysphonia ?

A. I prefer the term spasmodic dysphonia as this condition is a focal laryngeal dystonia characterised by action induced involuntary 'spasms' and a loss of the control of the intrinsic laryngeal musculature.

Options in the treatment of spasmodic dysphonia include surgical transection of the recurrent laryngeal nerve, anterior laryngoplasty, voice therapy and Botulinum Toxin therapy. Although none of this treatment is ideal, I find Botulinum Toxin injections have been most promising. The intralaryngeal injection of this drug is performed with electromyographic control

into the thyroarytenoid muscle for the commoner adductor type and into the posterior cricoarytenoid for the rarer abductor type of spasmodic dysphonia.

Dr Abir K Bhattacharyya
South Woodford, London

A. Spastic Dysphonia more appropriately described as spasmodic dysphonia falls into a group of Neurological diseases known as 'Movement Disorders' of unknown origin of which Adductor form is more common than Abductor form. Very often these patients after initial Voice and Psychotherapy are subjected to Recurrent Laryngeal Nerve lysis or Anterior Laryngoplasty.

Dr S. Ramchandra Reddy
Guntur

A. Our experience banks on only 4 case encountered by us so far. There is no cure for this disorder, nor is there a universally accepted treatment. Eventhough it though to be more neurogenic rather than psychogenic, psychotherapy in addition to speech therapy has been found to be useful. In 2 cases, we attempted unilateral recurrent laryngeal nerve block using Bupivacaine with temporary partial benefit. We have no experience in selective recurrent laryngeal nerve sectioning or in Botulinum toxin injection.

Dr D R Nayaik
Dr Deepak Murthy
Dr Balakrishnan
Manipal

A. Spastic Dysphonia treated by behaviour therapy and voice therapy has not produced satisfactory results. After an EMG study establishes with reasonable certainty the diagnosis of spastic dysphonia I would like to consider to injection of Botulinum toxin in the vocalis muscle to relieve the spasticity. Repeated injections may be necessary.

Dr Kamal S Parsram
Mumbai

- A. Section with CO₂ Laser of some ramifications of recurrent laryngeal nerves.

Dr Jean Abitbol
Paris, France

- A. Spastic dysphonia : I have experience of treating such a case in collaboration with Prof. Madhuri Behari, a neurologist at AIIMS, with botulinum toxin injection and the voice improved to an extent. I do not have experience in sectioning the recurrent laryngeal nerve. Before instituting any treatment one should ascertain the correct diagnosis since many of these suffer from non organic lesion. An elderly patient came to me for treatment of spastic dysphonia. The history was that the voice problem started immediately after a major accident two year back. Indirect laryngoscopic findings were normal. He was referred to a psychiatrist who successfully treated him.

Dr P Ghosh
New Delhi

- A. Spastic dysphonia : Diagnosis has to be as accurate as possible. Perhaps the patient may show other dystonias too.

Anti-psychotic drugs mimic the 'spasms' and have to be excluded. Diagnosis is by E.M.G. of the thyroarytenoid muscles through special needle electrodes which are inserted per-cutaneously and the ideal site selected

for deposition of the botulium toxin. Pharmacotherapy-tranquilisers have been tried but Tegretol seems to give reasonable relief in a large majority of pts. Relaxation exercises are recommended. Stress has a role to play in bringing about more spasms whereas taking increases the spasm, singing does not seem to make it worse.

Dr D M Anklesaria
Mumbai

NEW QUESTIONS

1. What is the current treatment of Rhinoscleroma ?
2. How do you manage a case of Inverted Papilloma of Nose ?
3. Your preferred technique of lateral osteotomy for Rhinoplasty ?

Your answer should be precise, authentic and more out of your own clinical experience.

If you have some figures to illustrate your answer, please follow instruction No 8 of 'Instruction to Authors', published on last page of IJLO.

Please send some interesting questions.

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CONGRATULATIONS

Dr. D. Dwarakanath Reddy has been elected as a member of the Medical Council, Andhra Pradesh.