

Review Article

The laryngectomee and swimming

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Abstract

Following laryngectomy patients are usually advised that swimming is no longer possible. Under supervised conditions and using a swimming aid, such as described, a laryngectomee may return to an activity previously considered unavailable, rehabilitation thus being more complete. However, for a laryngectomee to proceed a safe supervised environment is required, and the path to this goal is often long and arduous, but with persistent dedication the Laryngectomy Swimming Club may become a reality bringing rich reward.

Key words: Laryngectomy; Rehabilitation; Swimming

Introduction

Laryngectomy for the individual patient brings many problems such as the need to cope with a stoma, the adjustment to tracheostomal breathing and the formation of a 'voice'.

The pioneering work during the early 1980s in voice restoration following laryngectomy has been one of the landmarks in rehabilitation of this group of patients (Singer and Blom, 1980).

Rehabilitation involves many disciplines and support in the form of a Laryngectomy Club can prove invaluable. For those who had previously enjoyed recreational swimming the need for a laryngectomy may be a double blow. Gray (1982) described the facility to swim in a supervised environment utilizing a swimming aid designed for laryngectomees. The formation of a Laryngectomy Swimming Club (LSC) requires the active interest of the laryngectomees, the availability of sufficient supportive supervisory members, an appropriate venue and sufficient funds to provide for and maintain the necessary swimming aids and emergency equipment.

The aid described here is the only one currently available through UK suppliers and its use is under the control of Laryngectomy Swimming Clubs where adequate safety controls can be ensured.

Discussion

Some laryngectomy patients will go to great lengths in order to swim as illustrated by Bert Culling current President of NALC who travelled

monthly to London from Sunderland to be 'trained' to swim once more. With the active support of his consultant Peter Samuel, and the involvement of his unit the Sunderland Swimming Club was established.

The experience of the senior author (MRT) in this field of rehabilitation stems from the formation of the West of Scotland Laryngectomy Swimming Club (WofSLSC) based in Glasgow and the more recently formed South of England Laryngectomy Swimming Club (SofELSC) section of the Solent Laryngectomy Club, Gosport.

The National Association of Laryngectomy Clubs (NALC) supports this activity, but, registration of any laryngectomee who participates in swimming is mandatory to ensure that swimming is only done under safe controlled conditions. The NALC registration document requires a consultant signature with a copy sent to NALC for central filing. A 'Code of Conduct' swimming proforma is presented to the laryngectomee on registration. The UK supplier of the swimming aid, Kapitex Ltd, only sell to registered clubs and their members. Laryngectomy clubs being affiliated to NALC are able to use their registered charities number to avoid VAT.

Having identified an interested and well motivated group of laryngectomees who wish to swim an active drive to access sources of funding and recruitment of regularly available supportive supervisory members is necessary to establish a Laryngectomy Swimming Club on a firm foundation. Supportive supervisory members may be related to laryngectomees, or can be doctors/nurses/speech therapists as these are more closely involved with the laryngectomee. One

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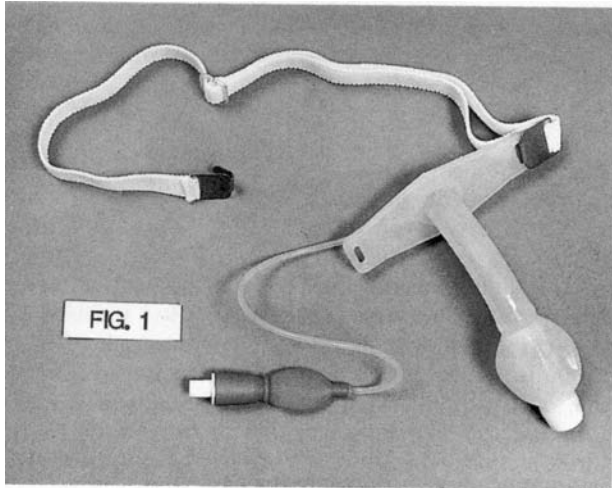


FIG. 1

Swimming aid comprising a soft, cuffed, silicon endotracheal tube (ETT).

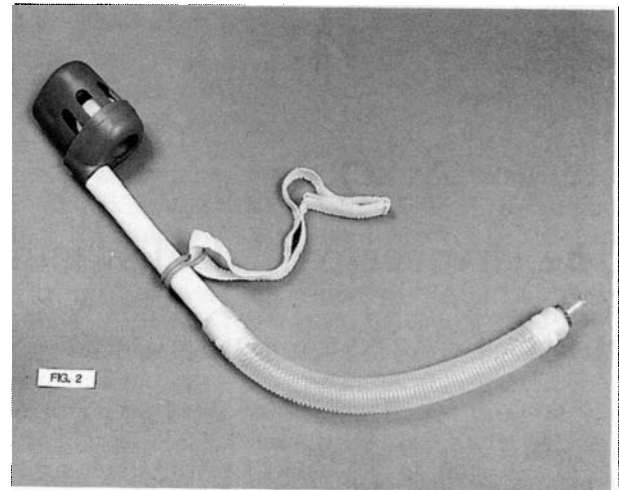


FIG. 2

Snorkel attachment for the swimming aid.

or two are required on the side of the pool to assist in the fitting of the swimming aid (although the competent laryngectomee soon manages unaided), and to monitor the swimming session with the safety equipment ready to hand. One or more supportive members should be in the water to ensure entry precautions are observed and guarantee a safe swim.

Safety is paramount, and a suitable functioning suction apparatus on the pool side is required with a choice from hand-held suction aspirators to electrical suction machines (ideally mains rechargeable portable equipment). Other ancillaries include suction catheters, local anaesthetic spray, a supply of swabs/

tissue and lubricant gel. The swimming aids numbered in their component parts with a supply of sterilizing solution and cleansing brushes completes the basic equipment to be purchased.

The swimming aid comprises a soft, cuffed, silicon endotracheal tube (ETT) (Figure 1) and a snorkel attachment (Figure 2) with its proximal end bevelled to insert into the lumen of the ETT from which extends a length of corrugated plastic tube connecting to the snorkel with its elasticated headband. As an alternative to the snorkel attachment a mouthpiece connection to the corrugated tube is provided (Figure 3) although the common practice is to prefer the snorkel.

Figure 4 (Parts 1 to 7) demonstrate the sequence of fitting for the swimming aid. The current advice is that any laryngectomee about to proceed should be supervised by supportive members who have received instructional training by recognized National Association of Laryngectomy Club (NALC) swimming members. Supportive members and laryngectomees should receive appropriate close tuition in the fitting of the swimming aid and all safety aspects of swimming.

Prior to the placement of the swimming aid it is usual to spray the trachea with a local anaesthetic spray (xylocaine one per cent) to reduce the tendency to cough secondary to the insufflated ETT cuff [Figure 4 (part 4)]. Once the neck strap has been comfortably placed [Figure 4 (part 5)] or after connecting the snorkel attachment [Figure 4 (part 6)] the laryngectomee is instructed to walk about ensuring no problems exist whilst on dry land! The laryngectomee then uses the steps of the pool (shallow end) to enter the water and with one hand on the ladder immerses to the chin. Any leak will become apparent with sputtering and action taken as required.

An emergency suction apparatus must be available at all times. Periodic checking of the swimming aid is required during the swimming session with particular attention taken to ensure the snorkel remains vertical and the ETT cuff is satisfactory and not

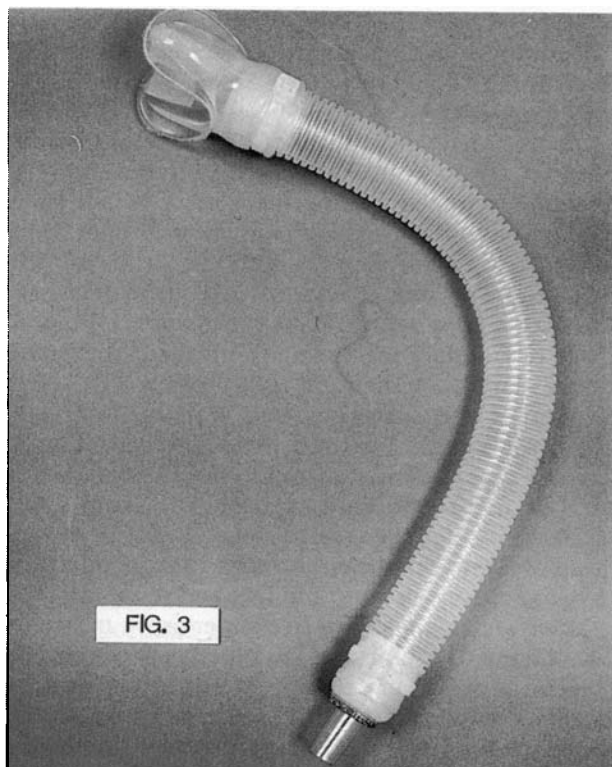


FIG. 3

FIG. 3
Mouthpiece connection for the swimming aid.

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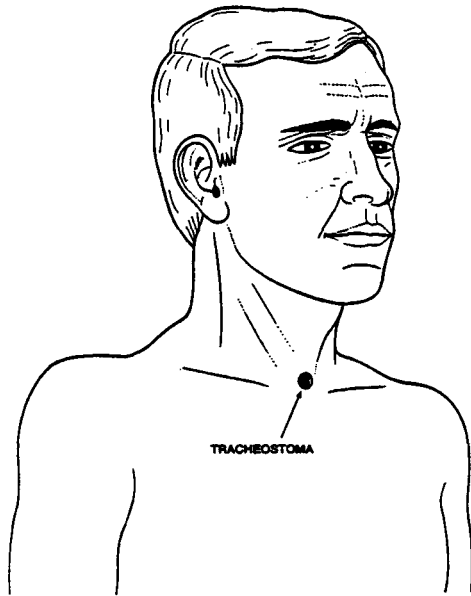


FIG. 4 Part 1.

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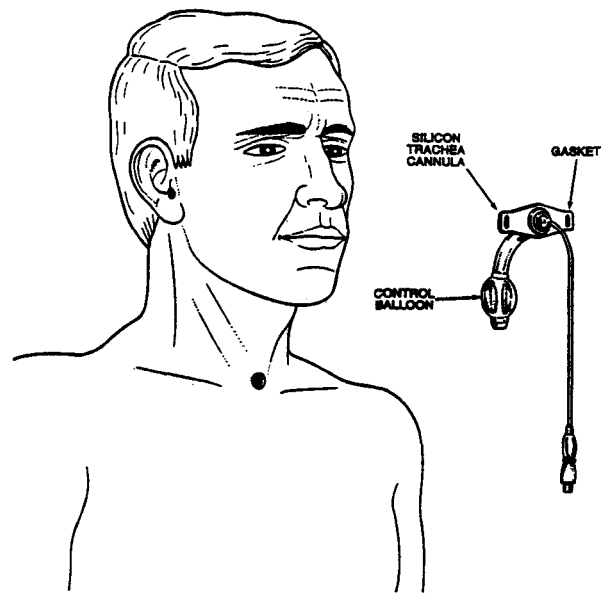


FIG. 4 Part 2.

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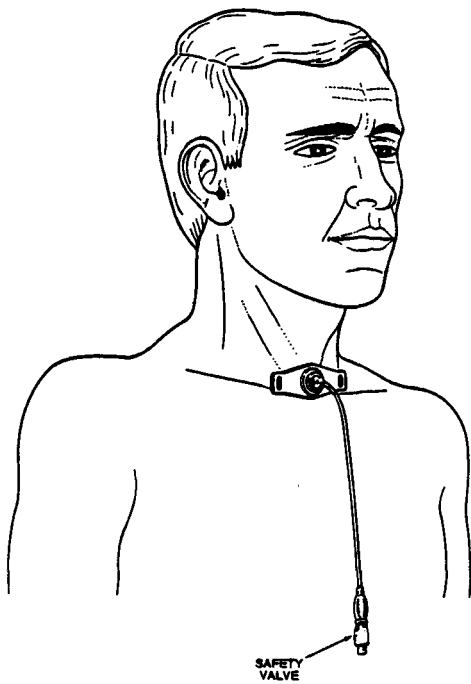


FIG. 4 Part 3.

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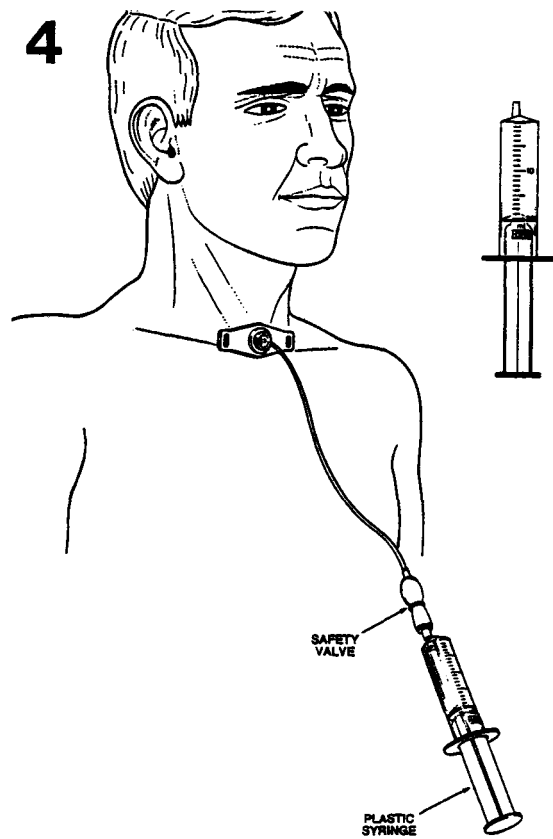


FIG. 4 Part 4.

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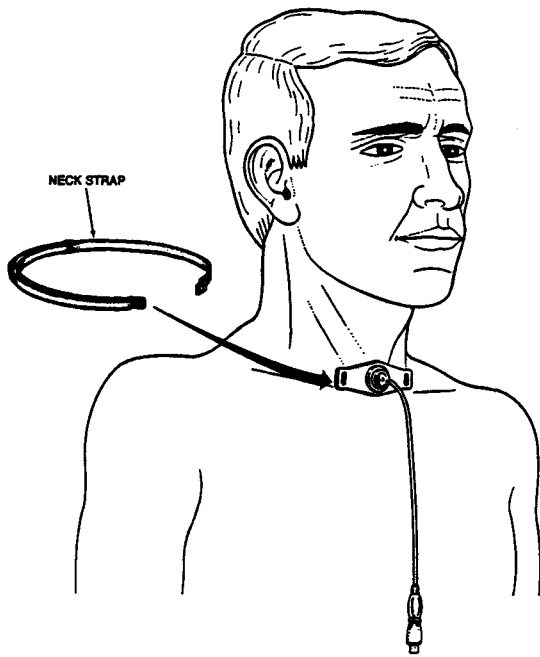


FIG. 4 Part 5.

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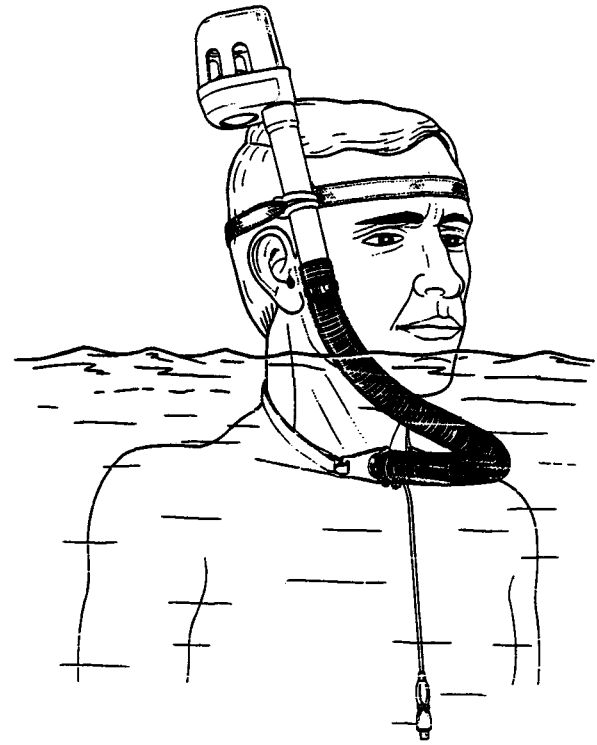


FIG. 4 Part 6.

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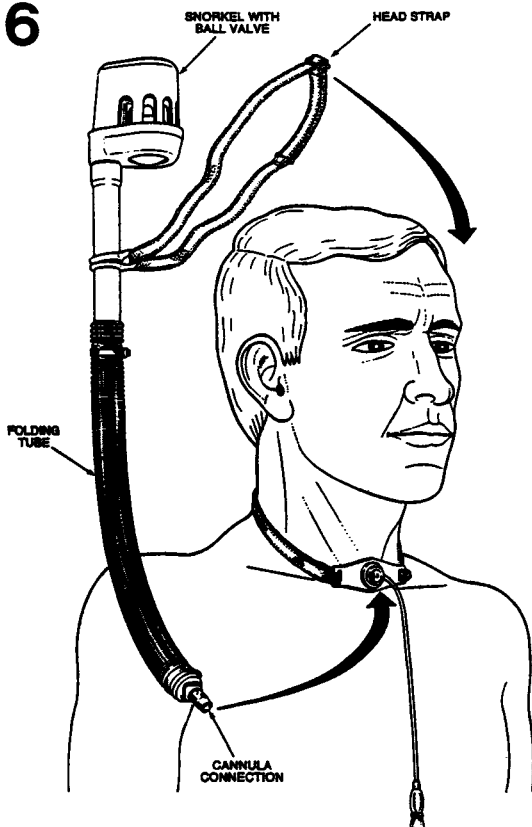


FIG. 4 Part 7.

Fig. 4 (parts 1-7)

Demonstrating sequence of fitting for the swimming aid.

Parts 1-4: Sequence of fitting for insufflated ETT cuff.

Part 5: Neck strap being fitted.

Part 6: Connecting the snorkel attachment.

Part 7: Swimming aid in place.

displaced. The presence of the ETT and increase in respiratory dead space makes the effort of swimming noticeable and is usually the limiting factor in the duration for any one individual swimming period. Secretions may also accumulate within the ETT and snorkel tubing this being easily remedied by removal, rinsing and refitting of the swimming aid which the experienced swimmer can do unaided (though observed for safety purposes).

The laryngectomee should also be aware that secondary to the cuff rubbing the tracheal mucosa it is not uncommon to find some blood spotting of sputum following swimming for up to two days.

Individual swimming aids should be available to each laryngectomee the ETT size having been assessed. Five sizes of swimming aids are available with the bevelled end of the snorkel matched to the ETT lumen necessitating five paired swimming aids in the range. Initial sizing of an aid should be by an ENT surgeon. Numbering the ETT and snorkel ensures that after the swimming session when all equipment is thoroughly rinsed and soaked in a sterilizing agent (Milton) the paired items are boxed together. One member is delegated to cleaning after each swimming session.

The venue should be selected ensuring that the water depth is not too excessive and joining in a local 'disabled' swimming session is often possible. The frequency of swimming sessions will depend upon the enthusiasm and availability of all involved.

The feelings of 'novice swimmers' are reflected in the following comments:

'After the initial trepidation the thrill of the experience in returning to the water took off'

'I worried about whether I would remember how to swim again, but, instinct won the day'.

'It was fantastic!'

'With some of the members spluttering when the swimming aid was fitted I was worried I can tell you – that said I was determined to give it a go, and any spluttering is short lived and I would not have missed it for the world'.

'When you have had your throat cut life

becomes a little restricted so you have to branch out and get into the swim of things!'

Conclusions

With suitable swimming aids more Laryngectomy Swimming Clubs are being formed each year, but, to continue they need to be formed on a solid foundation with secure financing, an active interest and a committee dedicated to continual success of the club. The National Association of Laryngectomy Clubs strongly supports the formation of a LSC and the facility to swim for the laryngectomee with a previous interest in this pastime makes rehabilitation more complete as witnessed by the delightful smile on the face of the laryngectomee taking the 'plunge' for the first time.

Acknowledgements

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