Management of Dysphagia after Supra Glottic Laryngectomy

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Abstract: Background: Rehabilitation of swallowing is as vital as speech in surgically treated head and neck cancer patients to maintain nutritional support, enhance wound healing and improve quality of life. Aspiration following supraglottic laryngectomy is very common, and rehabilitation of the same is crucial which requires involvement of speech therapist in close contact with head and neck surgeon. Objectives: To examine the functions of swallowing outcomes after intensive therapy in supraglottic laryngectomy. Materials: Thirty-nine supra glottic laryngectomees were participated in the study. Of them, 36 subjects were males and 3 were females, in the age range of 32-68 years. Eighteen subjects had undergone standard supra glottis laryngectomy (Group1) for supraglottic lesions where as 21 of them for extended supraglottic laryngectomy (Group 2) for base tongue and lateral pharyngeal wall lesion. Prior to surgery visit by speech pathologist was mandatory to assess the sutability for surgery and rehabilitation. Dysphagia rehabilitation started after decannulation of tracheostoma by focusing on orientation about anatomy, physiological variation before and after surgery, which was tailor made for each individual based on their type and extent of surgery. Supraglottic diet - Soft solid with supraglottic swallow method was advocated to prevent aspiration. The success of intervention was documented as number of sessions taken to swallow different food consistency and also percentage of subjects who achieved satisfactory swallow in terms of number of weeks in both the groups. Results: Statistical data was computed in two ways in both the groups 1) to calculate percentage (%) of subjects who swallowed satisfactorily in the time frame of less than 3 weeks to more than 6 weeks, 2) number of sessions taken to swallow without aspiration as far as food consistency was concerned. The study indicated that in group 1 subjects of standard supraglottic laryngectomy, 61% (n=11) of them were successfully rehabilitated but their swallowing normalcy was delayed by an average 29th post operative day (3-6 weeks). Thirty three percentages (33%) (n=6) of the subjects could swallow satisfactorily without aspiration even before 3 weeks and only 5 % (n=1) of the needed more than 6 weeks to achieve normal swallowing ability. Group 2 subjects of extended SGL only 47 % (n=10) of them could achieved satisfactory swallow by 3-6 weeks and 24% (n=5) of them of them achieved normal swallowing ability before 3 weeks. Around 4% (n=1) needed more than 6 weeks and as high as 24 % (n=5) of them continued to be supplemented with naso gastric feeding even after 8-10 months post operative as they exhibited severe aspiration. As far as type of food consistencies were concerned group 1 subject could able to swallow all types without aspiration much earlier than group 2 subjects. Group 1 needed only 8 swallowing therapy sessions for thickened soft solid and 15 sessions for liquids whereas group 2 required 14 sessions for soft solid and 17 sessions for liquids to achieve swallowing normalcy without aspiration. Conclusion: The study highlights the importance of dysphagia intervention in supraglottic laryngectomees by speech pathologist.

Keywords: dysphagia management, supraglotic diet, supraglottic laryngectomy, supraglottic swallow

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