QUALITY OF LIFE OF PATIENTS WITH ESOPHAGEAL REPLACEMENT FOR CONGENITAL AND ACQUIRED ESOPHAGEAL ANOMALIES

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QUALITY OF LIFE OF PATIENTS WITH ESOPHAGEAL REPLACEMENT FOR CONGENITAL AND ACQUIRED ESOPHAGEAL ANOMALIES (Abstract) Aim: To assess the long-term quality of life (QoL) and symptoms experienced by patients who underwent esophageal replacement for congenital and acquired children esophageal pathology. Material and methods: The study group comprised 71 patients divided into 2 groups, group I: 34 patients who underwent gastric tube esophagoplasty, and group II: 37 patients who underwent colic tube esophagoplasty. QoL score was assessed using a 24-item original questionnaire covering aspects of eating, disease-specific symptoms, physical and psychological development, and social integration. Results: QoL scores based on patient and parental responses were very close. Long-term postoperative functional outcomes for the two groups were comparable. Conclusions: The QoL scores and general life status were not influenced by the used technique and this pathology should be approached according to the particularity of each case and surgeon’s personal experience and preference. Keywords: QUALITY OF LIFE, ESOPHAGEAL REPLACEMENT, ESOPHAGEAL ATRESIA, CAUSTIC LESIONS

The most important criterion for assessing the long-term outcome for patients requiring of pediatric surgical procedures is quality of life (1, 2, 3).

The aim of this paper was to assess the long-term quality of life of a group of patients that have undergone esophagoplasty for congenital or acquired esophageal lesions. The study group comprised 71 patients who underwent esophageal replacement in the Pediatric Surgery and Orthopedics Unit of “Sf. Maria” Emergency Children Hospital, Iasi. The surgical procedures for esophageal replacement in both esophageal atresia and postcaustic esophageal stenosis were: gastric tube esophagoplasty and colic tube esophagoplasty. Since 1992 the authors’ procedure of choice for esophageal replacement has been colic tube esophagoplasty (left colon graft vascularized by the left colic artery) because of the lower incidence of complications and the advantages related to this technique. The long-term functional outcome appears to be clinically and radiologically favorable, but the assessment of the quality of life after such a major surgical procedure based on patients and/or their parents perception has not been investigated so far (4, 5).
MATERIAL AND METHODS

The authors have developed an original questionnaire comprising 24 items covering aspects of eating, disease-specific symptoms, psychological and physical status, and level of social integration.

Responses given by the patient/his parents for each item were scored according to the frequency of each symptom occurrence as follows: score 0 – all the time; 1 - most of the time; 2 –sometimes/quite often; 3 – rarely; 4 – never.

The total score of the questionnaire ranged from 0 to 96, with the highest score representing the best quality of life. Depending on the age of the patients at the time of assessment, the questionnaire was completed by them or their parents.

The study population was divided into 2 groups: group I-gastric tube esophageal replacement: 34 cases and group II- colic tube esophageal replacement: 37 cases.

All patients underwent a full investigation protocol with clinical and imaging evaluation (contrast barium study and esophageal-gastric endoscopy) in order to assess the postoperative functional outcome.

RESULTS

The mean time since esophageal replacement was 12.7 years with a range of 8 to 25 years: 14.8 years for group I and 10.9 years for group II.

The mean number of surgical interventions for each case was 4 (group I- 4 surgical procedures/case and group II- 5 surgical procedures/case). The mean age at esophageal replacement was 5.6 years, ranges 2 to 17 years; the mean age of the patients participating in this assessment was 14.1 years, ranges 8 to 37 years.

The social status of the patients was as follows: educational level: primary school 25 patients; secondary school 25 patients; professional school 9 patients; high school 9 patients; post-school qualification 9 patients, and university 4 patients.

Of the adult patients 12 were qualified employees and 14 were doing odds jobs.

The following aspects of eating have been followed: unrestricted diet; size of the meals as compared to other family members; need of water intake during meals; dysphagia; total number of meals per day; episodes of coughing associated with meals.

A slightly higher score by 2 points was obtained based on parental perception as compared with patient perception. For the two study groups the mean score was 80 for the gastric tube esophageal replacement (group I), and 81 for the colic tube esophageal replacement (group II).

DISCUSSION

Given the great diversity of treated anomalies, the different ages of patients at the time of surgery, the particularities of each surgical intervention (graft in retrosternal position or in the “bed of the old esophagus”, with or without esophagectomy), an accurate long-term assessment of postoperative outcomes is perfectly justified and opportune (6, 7). The aim of the present paper was to measure and compare some aspects of the quality of life for
patients who underwent colic tube or gastric tube esophageal replacement at pediatric age. As far as the authors are aware, in Romania there are no other studies that have investigated the long-term quality of life in patients with such surgical interventions. As to the functional and imaging outcome, over the time there have been frequent attempts to compare the two used techniques, but all have failed to establish which technique is superior in terms of postoperative results (8,9). In the two groups, the QoL scores were quite similar (80 and 81, respectively) and showed that there were no important patient/parents differences in perception of quality of life in relation with the surgical technique used (1).

Because we did not use a standard questionnaire that could have been applied to healthy individuals as control group, we could not make a comparison of health-related quality of life in our patients with the quality of life in healthy population. We noticed that patients tended to perceive their QoL as being poorer than their parents’ perception, and this trend was more marked as adults’ age increases and they become aware of the problems related to surgical intervention (1, 2).

CONCLUSIONS
Generally speaking, the patients who underwent esophageal replacement live a normal life although their psychosocial integration and their emotional independence is somehow reduced. The two most frequently used techniques of esophageoplasty have comparable postoperative outcomes in terms of patients/ family perception and socio-professional and emotional integration.

The choice of a specific surgical technique for esophageal replacement in patients with congenital or acquired esophageal lesions should be based on the particularities of each patient because there are no objective criteria to guide the surgeon.

REFERENCES