Employment Status and QOL With Laryngectomized Patients

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Purpose:
The purpose of this research is to clarify the change of employment status and quality of life (QOL) from before surgery to twelve months after discharge from hospital among laryngectomized patients.

Methods:
Subjects were 199 patients who underwent laryngectomy at six hospitals in Japan and agreed to participate in the research. A leaving method was used to collect questionnaire before surgery and at the time of discharge from hospital. A mailing method was used three, six, and twelve months after discharge from hospital. They were asked about age, sex, family configuration, employment status, and QOL. QOL was measured using the SF-36, generic scale composed of physical functioning (PF), role physical (RP), bodily pain (BP), general health perceptions (GH), vitality (VT), social functioning (SF), role emotion (RE), and mental health (MH). Then, norm-based scoring (NBS) based on the national standard value (50) was calculated. We collected descriptive statistics of basic attributes and employment status. A chi-square test was conducted for the analysis of association of employment status, sex, and family configuration with periods (p < .05). Analysis of variance was conducted for the analysis of association between age and periods (p < .05). The Wilcoxon signed-ranks test was
used to detect differences between QOL and its national standard value (p < .05). This research was approved by the Research Ethics Committee at Fukuoka University.

**Results:**
The mean age of patients at the time of surgery was 64.6±8.6 years old (ranging from 39 to 82). They were 176 males (88.4%) and 23 females (11.6%). The mean age of those who were not working was significantly higher than that of those who were working at all time periods. Sex and family configuration failed to affect employment status at a significant level. Before surgery, QOL was significantly different in PF_N, RP_N, GH_N, SF_N, RE_N, and MH_N for those who were working, and in PF_N, RP_N, GH_N, BP_N, SF_N, RE_N, and MH_N for those who were not working. There were significant differences in all subscales at three months after discharge from hospital. At six months after discharge from hospital, there were significant differences in all subscales for those who were working, and in all subscales except VT_N for those who were not working. At twelve months after discharge from hospital, there were significant differences in PF_N, RP_N, GH_N, SF_N, and RE_N for those who were working, and in PF_N, RP_N, BP_N, GH_N, VT_N, SF_N, and RE_N for those who were not working.

**Conclusion:**
QOL was generally declining before surgery and remained low until twelve months after discharge from hospital. It was found that, regardless of whether or not they were working, their low physical functions and pain continued, restricting their daily lives for physical and psychological reasons. It is thought that those who continue to work face difficulties in the workplace. It is necessary to continue physical and psychological support for those who want to continue to work after their discharge from hospital. Therefore, we must establish a support system from employers.

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**Title:**
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**Keywords:**
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**Abstract Summary:**
We longitudinally examined employment status and quality of life with 199 laryngectomized patients. QOL assessed by the SF-36 was low until twelve months after discharge. It is necessary to continue physical and psychological support for those who want to continue to work after their discharge from hospital.

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