Case report

Improvement in Quality of Life through Oral Care for Difficulty in Speaking in a Terminally Ill Cancer Patient: Case Report

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Abstract: Terminally ill cancer patients experience various adverse oral symptoms because of a deterioration in their systemic conditions. Some terminally ill cancer patients have difficulty in communicating with others because of dry mouth or xerostomia. This problem exerts a substantial negative impact on social activities, including interpersonal relationships. We present a case involving a 70-year-old man with terminal cancer who experienced xerostomia and achieved improved QOL through oral care. He was unable to perform self-care and had experienced xerostomia. His xerostomia caused difficulty in communicating with others. We performed oral care in collaboration with a dentist and dental hygienist, and provided oral care. In this case, although the patient was unable to communicate with his family easily because of xerostomia, oral care improved his oral cavity conditions, symptoms control, and patients' comfort. Oral care may help improve the symptom and QOL in terminally ill cancer patients.

Key words: oral care ／ palliative care ／ cancer patient ／ xerostomia

Introduction

Terminally ill cancer patients experience various adverse oral symptoms (e.g., dry mouth, stomatitis, and oral candidiasis) because of a deterioration in their systemic conditions[1-3]. In our clinical experience, some terminally ill cancer patients have difficulty in communicating with others because of dry mouth or xerostomia. In addition, terminally ill cancer patients with low levels of activities of daily living cannot perform oral self-care; consequently, the condition of the oral cavity declines[2]. This problem exerts a substantial negative impact on social activities, including interpersonal relationships.

The appropriate mouth care is helpful to reduce a risk of oral mucositis and respiratory tract infection and may have influence that it is good for quality of life[4]. Furthermore, the good oral hygiene improves dry mouth or xerostomia and can help them speak effectively[5]. Although oral care represents an essential task of palliative care, it is often not considered as a priority, especially if various complex patient conditions are to be managed. Physicians and nurses do not apply attention to patient's oral conditions, and the oral clinical evaluation is not often reported in a medical record[6, 7]. In addition, the oral assessment tool is not commonly used by nurses in daily clinical practice[8]. Although it is described in previous studies that the oral care is important for terminally ill cancer patients, the method of the standard oral care based on the evidence is not found. In addition, the training to physicians and nurses is insufficient[9, 10]. Therefore, oral problems need to be resolved to

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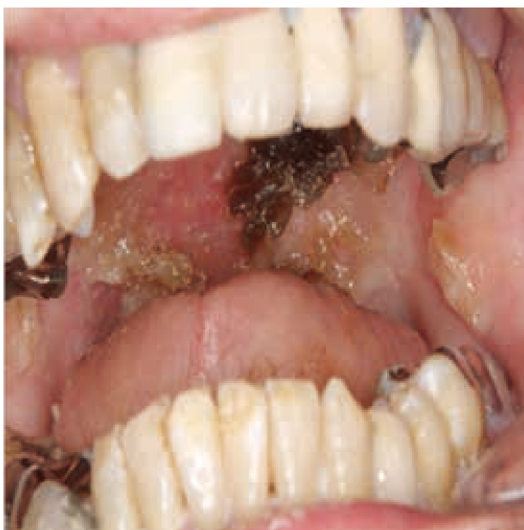
improve quality of life (QOL) for terminally ill cancer patients. We present a case involving a 70-year-old man with terminal cancer who experienced xerostomia and achieved improved QOL through oral care. The study was conducted with the consent of the patient and their families.

Case

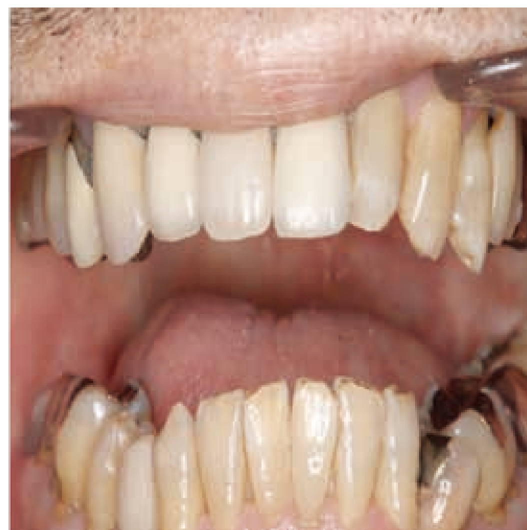
A 70-year-old man with advanced lung cancer was hospitalized in the palliative care ward. His performance status was 4; he was receiving 500 ml of fluid supplementation per day, which he found difficult to take orally and, even though he did not receive oxygen therapy, his SpO_2 was 98%. He was bedridden because his lung cancer had progressed. Consequently, he was unable to perform self-care and had experienced xerostomia. His xerostomia caused difficulty in communicating with his family and loved ones.

We collaborated with a dentist and dental hygienist and provided oral care. We reviewed previous studies describing oral care and collaborated with a dentist and dental hygienist to develop an approach to provide oral care to the patient. In addition, we assessed his oral cavity condition and comfort before and after oral care. Oral care was performed according to the following procedures: 1) explaining the importance and effectiveness of oral care; 2) raising the head of the bed by 30 degrees; 3) tilting his chin down; 4) moisturizing his lips using Vaseline; 5) moisturizing his intraoral mucosa with water using a sponge brush, and waiting 5 minutes; 6) brushing his teeth gently; 7) removing intraoral stains using a sponge brush; and 8) moisturizing his oral cavity using Butler Gel Spray (SUNSTAR, Takatsuki, Oosaka, Japan).

We assessed his oral cavity condition using the revised oral assessment guide (ROAG)[11], which consists of the following eight categories: voice; lips; mucous membranes; tongue; gums; teeth/dentures; saliva; and swallowing. Each category is scored as follows: 1 point indicates a normal condition, 2 points indicates an altered condition without loss of function; and 3 points indicates severe alteration with loss of function. Figure 1 shows his oral cavity condition. Before oral care (Figure 1-a), his ROAG score was 21 (voice: 3, lips: 2, mucous membranes: 2, tongue: 3, gums: 2, teeth/dentures: 3, saliva: 3, and swallowing: 3). Three days after oral care (Figure 1-b), his total ROAG score decreased to 15 (voice: 2, lips: 1, mucous membranes: 2,



a) Before the oral care



b) 3 days after the oral care

Figure 1.
Oral cavity condition in a 70-year-old man with terminal cancer before(a) and after(b) oral care

tongue: 2, gums: 2, teeth/dentures: 1, saliva: 2, and swallowing: 3).

Patient-reported comfort was assessed before and three days after oral care. We asked him the following question to assess his oral comfort: “How do you feel about your oral comfort?” In addition, we recorded the time spent providing oral care. The patient said, “It feels good to be refreshed,” and “I am very happy to be able to communicate with my family. I am happy.” A family member stated, “It became easy to hear his conversation. I am very happy.” Oral care provided was with a frequency of twice a day, adhering to the Registered Nurses Association of Ontario (RNAO) guidelines on oral health[12]. The average time spent for performing oral care was 11.3 minutes during each turn.

Discussion

In this case, although the patient was unable to communicate with his family or loved ones easily because of xerostomia, oral care improved his oral cavity conditions, symptoms control, and patients’ comfort. A previous study reported that more than 90% of physicians and nurses working in certified palliative care units and teams indicated that dental services for terminally ill cancer patients were necessary[13]. In addition, more than 90% of the physicians and nurses believed that oral care provided by specialists was often or sometimes necessary. Although terminal ill cancer patients have complex needs and their care can be cumbersome for health-care professionals, oral care should not be overlooked because it can improve the QOL and help to relieve symptoms (e.g., dry mouth, stomatitis, oral pain, and speaking difficulties). We believe that this positive result was obtained because we performed oral care in collaboration with a dentist and dental hygienist.

By comparing the oral conditions before and after performing oral care, we found that the total ROAG score improved from 21 to 15 points, which indicates an improvement in oral hygiene (improved ROAG items included voice, lips, tongue, teeth/dentures, and saliva). We believe that our approach to oral care showed improved ROAG scores because we were able to effectively moisturize and decontaminate the oral cavity. Previous studies have reported improvements in ROAG items (voice, lips, tongue, and teeth/dentures) under oral care (P value <0.01)[5]. Therefore, oral care may be particularly effective for these items in terminally ill cancer patients. Also, previous studies have reported that a professional oral care approach in collaboration with dentistry can improve ROAG scores[14]. Therefore, we believe that providing oral care in collaboration with dentistry can help improve oral hygiene.

Furthermore, there is no gold standard of oral care for terminally ill cancer patients[10]. Therefore, we believe individualized oral care tailored to the patient’s oral cavity condition is required, as indicated by the results of this case study. Furthermore, we expect gold standard oral care to be developed and provided to patients in the future.

Conclusion

Oral care may help improve the quality of life in terminally ill cancer patients.

Disclosure/conflict of interest

The authors have no conflicts of interest to declare. We thank Editage (www.editage.jp) for English language editing.

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コミュニケーションに困難を抱える終末期がん患者に対する口腔ケア：QOLの向上を目指した症例報告

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要旨：多くの終末期がん患者は，全身状態の悪化に伴い様々な口腔内の苦痛症状を呈している。また，終末期がん患者の中には，口腔内乾燥が原因によりコミュニケーションに問題を抱えている患者も存在する。この問題は，家族とのコミュニケーションなど対人関係を含む社会活動に大きな悪影響を及ぼす。本研究では，口腔内乾燥を経験している70歳男性の終末期がん患者に対して，口腔ケアを実施することによりQOLが改善した症例を紹介する。男性はセルフケアができず口腔内乾燥による苦痛症状を経験していた。また，口腔内乾燥が原因となり家族とのコミュニケーションがうまく取れず問題を抱えていた。そこで私たちは，歯科医師，歯科衛生士と連携して口腔ケアの方法を考案し，実施した。この症例では，口腔内乾燥が原因で家族とのコミュニケーションに問題を抱えていたが，考案した口腔ケアを実施することで口腔内の状態や苦痛症状が改善され，さらには患者の快適性が向上した。考案した口腔ケアは，終末期がん患者の症状やQOLを改善させるために役立つかもしれない。

索引用語：　口腔ケア　／　緩和ケア　／　がん患者　／　口腔内乾燥

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