두경부암에 의한 안면부와 경부 피부의 침습과 전이

최은창 · 고윤우 · 김문석 · 김현준 · 정태영 · 최재진 · 김철호 · 김영호

Invasions and Metastases of Facial and Neck Skin by Head and Neck Cancer

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ABSTRACT

Background and Objectives: This study was designed to review the incidence of skin involvement in the head and neck cancer. We also reviewed its pattern, treatment results, and prognostic significance of skin invasion and metastases. Materials and Methods: We carried out an retrospective evaluation of 41 patients who required resection of the facial or neck skin during surgery for their head and neck cancer in the last ten years. Patients with head and neck skin cancer were excluded from this study. Patients who developed skin involvement were evaluated with regard to the primary origin of tumor, the tumor stage, and the pattern of skin involvement, treatment and outcome. The cases were classified into four groups: firstly, a group with the presence of skin scar made by previous biopsy; secondly, a group with tumor fixed to skin; thirdly, a group with skin resected with a sufficient resection marginal, and lastly a group with gross involvement of skin by tumor. Results: Among 41 patients who required resection of the skin, patients with skin invasion were noted in 24 cases. Only one out of four cases of the biopsy group had skin involvement whereas a half of the fixed group had skin invasion. For the marginal group, only two cases had invasion of skin. The treatment result of patients with skin involvement had poor prognosis compared to patients without skin involvement. In particular, patients with skin metastasis had extremely poor survival. Conclusions: Skin involvement in the head and neck cancer indicates a poor prognosis, and should not be considered for surgery. (Korean J Otolaryngol 2001;44:517-21)

KEY WORDS: Skin metastases · Skin involvement · Head and neck cancer.

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| | | | | | Table 1. Pat | terns of skin involvement in | head and neck cancers |
|---------|--------------|---------|-------------|------------|----------------------------------|---|----------------------------|
| | | | | | Patte | rns (n = No of patients) | Skin involvement (%) |
| | | | | | Skin scar by ii (Biopsy group | ncisional biopsy (n = 4) p) | 1 (25.0) |
| | | | | | | oy tumor (n = 10) | 5 (50.0)* |
| | | | | | | ection margin (n = 10) | 2 (20.0) |
| 1990 | 1999 | | | | | ement of skin by tumor (n = | 17) 16 (94.1) [†] |
| | | | フ | ŀ | Total (n = 41) | | 24 (58.5) |
| 44 | | | | 가 | *: one case †: four cas | e of skin metastases was i ses of skin metastases we | ncluded. re included. |
| 41 | | 0 | | • | | | 47 |
| 가 32 | , o | 9 | | | , | | 17 |
| 27 7 | '8 | (0) | 57 | . (0.) | (| , invasion group). | |
| | (9), | (8), | (7), | (6) | | 10 | |
| | , | , | , 35 가 | | 7 | (Table 1). | |
| | | 15 , | | 11 , | 1 cm | | |
| 9 | | 6 | | (ad - | | | |
| | c carcinoma | | | (mu - | | • | 가 |
| - | id carcinom | • | (snindl | e cell ca- | | | * 1 |
| | | | hic adenoma | | 2 om | | |
| | | | | λ , | 3 cm | | • |
| (mapuon | nyosarcoma | 1) | 1 . | | | | |
| | | | | , | | | |
| | , | , | | | | (subcut | taneous tissue inva- |
| | | | | | sion)가 | | • |
| | | | | 21 | | | |
| | 20 | | | | | 가 | |
| | | | | | 6)8) | 5 | |
| | | | | | (| survival time) | |
| | | | 71.0 | 20 | , | | |
| 40 | | | 가 2 | .3 | (| median survival time) | Kaplan - Meier |
| 18 | 71 | | | | | • | |
| | 가 | | -1 | | | | |
| , | | , | 가 | 4 | | | |
| (| , biopsy g | roup), | | | | | |
| | | | 가 1 | 0 | 41 | | |
| (| , fixation o | group), | | | | (Table 2). 8 | |
| | | | | | 가 | 3 | . 4 |
| | | 가 10 | (| , margin | | | |
| group). | | | | | 가 18 | 8 | |
| 가 | | | | 4 | | 4 , | 2 , |
| | | | | _ | | _ | |
| | 4 | | | 2 | | 1 . | |
| | 4 | | | 2 | 41 | 1 . | 24 |
| | 4 | | | 2 | 41 (58.5%) | 1 . (Table 1). | 24 4 |

Table 2. Types of reconstruction after resection of the facial or neck skin during surgery for their head and neck cancers

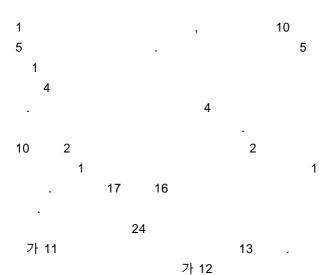
| | РС | STSG | LF | РММС | FF |
|-------------------------|----|------|----|------|----|
| Biopsy group (n = 4) | 4 | | | | |
| Fixation group (n = 10) | 1 | 1 | 1 | 7 | |
| Margin group (n = 10) | 1 | 1 | 3 | 3 | 2 |
| Invasion group (n = 17) | 2 | 1 | | 8 | 6 |
| Total (n = 41) | 8 | 3 | 4 | 18 | 8 |

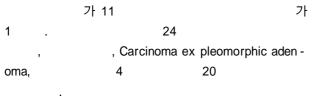
n = Number of patients, PC: primary closure, STSG: split thickness skin graft, LF: local flap, PMMC: pectoralis major myocutaneous flap, FF: free flap

Table 3. Vital status according to the patterns of skin involvement

| | NED | DOD | DOID | POD | AWD |
|-------------------------|--------|---------|-------|-------|-------|
| Biopsy group (n = 4) | 3 (1) | | | | 1 (0) |
| Fixation group (n = 10) | 5 (2) | 2 (2) | 1 (0) | 2 (1) | |
| Margin group (n = 10) | 7 (0) | 2 (2) | | | 1 (0) |
| Invasion group (n = 17) | 4 (3) | 8 (8) | 2 (2) | 3 (3) | |
| Total (n = 41) | 19 (6) | 12 (12) | 3 (2) | 5 (4) | 2 (0) |

n = number of patients, () = number of skin involvement NED: no evidence of disease, DOD: die of disease DOID: die of intercurrent disease, POD: perioperative death AWD: alive with disease







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(mean su -

(Table 3).

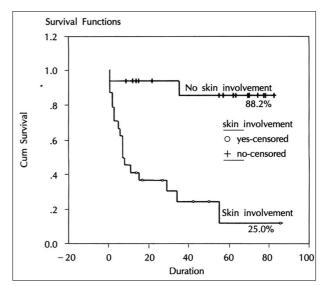


Fig. 1. Survival curve based on the existence or non-existence of skin involvement ($n^* = 41$, 1990 - 1999, *: number of patients).

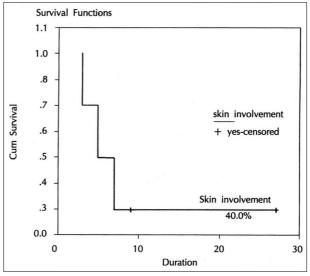
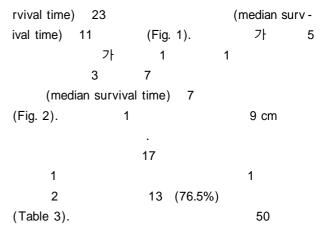


Fig. 2. Survival curve of head and neck cancer with skin metastases (n* = 5, 1990 - 1999, *: number of patients).



| | | | (mean survival | | | .13)14 |
|-------|---------|-----------|----------------|--------------|-------------------|----------|
| time) | 73 | (Fig. 1). | | 4 가 5 3 가 | | 5 |
| | 가 가 | · | 4 가 | | 3 1 15×10 cm | 2 가 |
| | . 4 | | 1 | | 가 | |
| | | 3 | 71. | | 71.1 om 71 | 가 가 기 |
| | 9 - 12) | | 가 | | 가 1 cm가 | 가 |
| 1 | 가 | | . 가 | | 가 . 가 4 4 1 | 10 가 |
| | 1 | | | | | |
| | | | 가 가 | | 6 . | |
| | 가 | | 1 cm 가 | 가 | . 3 | |
| | 가 , | | 가 가 | | | 가 가 가 |
| | | 10 | 5 (50%) | 가 | | |
| | | | 가 | 가 | | |

520

| 가 | 가 | | 가 | |
|--------|-------------|---|------------------------|-----------------|
| 16 | 가 가) | 가 | (median survival time) | 7 アト 3 (1 |
| , | | | 가 , | 가 가 |
| | | 가 | | |
| 가 가 | | | | 가 |

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