

Report of Head and Neck Cancer Registry of Japan  
Clinical Statistics of Registered Patients, 2002

Japan Society for Head and Neck Cancer  
Cancer Registry Committee

## Preface

The Head and Neck Cancer Registry of Japan was founded in 1981 by the Subcommittee for Head and Neck Cancer of the Japanese Joint Committee. Although its first purpose was to formulate Japanese proposals for the TNM classification based on collected data, it soon became apparent that this vast registry contributes greatly to the understanding of the statistics and treatments of head and neck cancer in Japan.

One thousand one hundred and seventy-six patients treated in 1979 were registered in the first registration which took place in 1981. Since then the registration has been repeated every year. Although the annual number of registered patients had increased steadily until 1990, it shifted to a constant decline afterwards because this registry was not supported by any societies and therefore its data were not totally public and were available only to researchers in the cooperating institutions.

In 2001, the Japan Society for Head and Neck Cancer decided to support the Head and Neck Cancer Registry to maintain the quality of its data and created the Cancer Registry Committee to renew the old-fashioned registration system. The first new registration took place in 2003, registering 1,335 head and neck cancer patients treated in 2001.

This supplement is the report of the second year of the new registration.

I would like to express my deepest appreciation to the Japan Society for Head and Neck Cancer for the academic and financial support. I would also like to thank Ms. Kazumi Oono for her help in the management of registration forms. Last but not least, I would like to express my gratitude to all the doctors in the participating institutions, hopefully expecting their successive cooperation.

I hope this English edition will provide valuable information in the field of head and neck oncology not only nationally but internationally.

August 29, 2006

Masahisa Saikawa, MD  
Chairperson  
Cancer Registry Committee,  
Japan Society for Head and Neck Cancer

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Cancer Registry Committee,  
Japan Society for Head and Neck Cancer

Chairperson	Masahisa Saikawa
Members	Hideki Chijiwa, Takashi Fujii, Hiroyuki Harada, Seiichi Yoshimoto, and Takashi Yoshizumi
Secretariat	Division of Head and Neck Surgery, National Cancer Center Hospital East 6-5-1 Kashiwanoha, Kashiwa, Chiba, Japan 277-8577 Phone: 04-7133-1111 ext. 5575

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### Data Collection

All the member institutions of the Japan Society for Head and Neck Cancer were advised to participate in the registration. The secretariat sent registration forms to 54 institutions which expressed their cooperation. The completed registration forms provide information regarding patients' age and sex, tumor pathology, TNM classifications, site and size of the primary tumor and neck metastases, therapies (surgery, radiation, and chemotherapy), and prognosis. All registration forms returned by 45 institutions were thoroughly reviewed by head and neck oncologists, stored in a computerized data file, and analyzed in the secretariat.

Registration was restricted to previously untreated cancer cases which had pathological confirmation and arose in the aero-digestive tract of the head and neck area, *i.e.* the oral cavity, larynx, hypopharynx, oropharynx, nasopharynx, nasal cavity or paranasal sinuses. Tumors arising in the cervical esophagus were excluded. Head and neck tumors were classified according to the General Rules for Clinical Studies on Head and Neck Cancer (The Third Edition, November 2001, Japan Society for Head and Neck Cancer), which are based on the TNM Classification of Malignant Tumours (Fifth Edition, 1997) of the International Union Against Cancer (UICC).

For head and neck cancer patients treated in 2002, 2,226 completed registration forms were returned to the secretariat, of which 62 were excluded (double registration 36, pre-treatment unknown 10, primary site unknown 7, treated cases 6, primary site not meeting the registration criteria 2, pathology unknown 1), making the total number of registered patients 2,164. A follow-up study of these patients is scheduled for 2008, in which each case will have a follow-up period of more than 5 years.

## List of 45 Institutions which participated in the Registry in 2002

1. Department of Otolaryngology-Head and Neck Surgery, Hokkaido University Graduate School of Medicine
2. Division of Oral & Maxillofacial Surgery, Department of Oral Pathobiological Science, Graduate School of Dental Medicine, Hokkaido University
3. Division of Maxillofacial Surgery , Tohoku University Graduate School of Dentistry
4. Division of Head and Neck Surgery, Miyagi Cancer Center Hospital
5. Division of Otorhinolaryngology & Head and Neck Surgery, Department of Sensory Medicine, Akita University School of Medicine
6. Department of Dentistry and Oral Surgery, Okubo Hospital
7. Department of Otolaryngology-Head and Neck Surgery, Jichi Medical School
8. Department of Head and Neck, Gunma Cancer Center
9. Department of Otorhinolaryngology, National Defense Medical College
10. Department of Head and Neck Surgery, Saitama Cancer Center
11. Division of Otorhinolaryngology, Graduate School of Medicine, Chiba University
12. Division of Head and Neck Surgery, Chiba Cancer Center Hospital
13. Head and Neck Surgery Division, National Cancer Center Hospital
14. Department of Otolaryngology, Nippon Medical School
15. Department of Otorhinolaryngology-Head and Neck Surgery, Graduate School of Medicine, University of Tokyo
16. Maxillofacial Surgery, Department of Maxillofacial Reconstruction and Function, Division of Maxillofacial and Neck Reconstruction, Graduate School, Tokyo Medical and Dental University
17. Oral and Maxillofacial Surgery, Department of Oral Restitution, Division of Oral Health Sciences, Graduate School, Tokyo Medical and Dental University
18. Department of Otorhinolaryngology, School of Medicine, Keio University
19. Department of Otorhinolaryngology, Tokyo Medical University
20. Department of Otolaryngology, Tokyo Women's Medical University
21. Department of Radiology, Tokyo Women's Medical University
22. Department of Otolaryngology, Head and Neck Surgery, Kyorin University School of Medicine
23. Division of Head and Neck, Cancer Institute Hospital, Tokyo
24. Department of Oral and Maxillofacial Surgery, Yokohama City University
25. Department of Otorhinolaryngology, Showa University Northern Yokohama Hospital

26. Department of Otorhinolaryngology Head and Neck Surgery, University of Fukui Faculty of Medical Sciences
27. Department of Otolaryngology and Department of Oral Surgery, Yamanashi Prefectural Central Hospital
28. Department of Dental and Oral Surgery, Shinshu University School of Medicine
29. Department of Head and Neck Surgery, Aichi Cancer Center
30. Department of Otorhinolaryngology, Kyoto Second Red Cross Hospital
31. Department of Otolaryngology, Head and Neck Surgery, Kansai Medical University
32. Second Department of Oral and Maxillofacial Surgery, Osaka University Graduate School of Dentistry
33. Department of Otolaryngology, Osaka Medical Center for Cancer and Cardiovascular Diseases
34. Division of Otolaryngology-Head and Neck Surgery, Osaka General Medical Center
35. Department of Otorhinolaryngology, Osaka Koseinenkin Hospital
36. Department of Head and Neck Surgery, Hyogo Medical Center for Adults
37. Department of Otorhinolaryngology, Yoka Hospital
38. Department of Otolaryngology-Head and Neck Surgery, Wakayama Medical University
39. Oral and Maxillofacial Surgery, Division of Medico-Dental Dynamics and Reconstruction, Subdivision of Medical Science for Oral and Maxillofacial Regeneration, The University of Tokushima School of Dentistry
40. Department of Otorhinolaryngology, Faculty of Medicine, Kagawa University
41. Division of Head and Neck Surgery, Shikoku Cancer Center
42. Department of Otolaryngology-Head and Neck Surgery, Kurume University, School of Medicine
43. Department of Otolaryngology-Head and Neck Surgery (Unit of Translational Medicine), Nagasaki University Graduate School of Biomedical Sciences
44. Department of Otolaryngology, Oita University Faculty of Medicine
45. Department of Otorhinolaryngology, Kagoshima City Hospital

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Total Cases	-----	1
Oral Cavity	-----	15
Larynx	-----	35
Hypopharynx	-----	56
Oropharynx	-----	65
Nasopharynx	-----	74
Nasal Cavity and Paranasal Sinuses		
Excluding the Maxillary Sinus	-----	83
Maxillary Sinus	-----	92

Total Cases (2002)

2164 Cases

## Head and Neck Carcinoma ----- 2164 Cases

## Primary Site

Site	Number of patients
1) Oral cavity	688 ( 31.8%)
2) Larynx	514 ( 23.8%)
3) Hypopharynx	389 ( 18.0%)
4) Oropharynx	290 ( 13.4%)
5) Nasopharynx	88 ( 4.1%)
6) Nasal cavity, <i>etc.</i>	56 ( 2.6%)
7) Maxillary sinus	139 ( 6.4%)
Total	2164 (100.0%)

Nasal cavity, *etc.* : nasal cavity and paranasal sinuses  
(excluding the maxillary sinus).

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	1	0	0	1
20 - 29	14	9	0	23
30 - 39	26	23	0	49
40 - 49	131	31	1	163
50 - 59	440	71	0	511
60 - 69	607	117	0	724
70 - 79	430	120	0	550
80 - 89	80	51	0	131
90 -	6	6	0	12
Unknown	0	0	0	0
Total	1735	428	1	2164



## Head and Neck Carcinoma ----- 2164 Cases

## Histological Distribution by Primary Site

Histologic type	(1)	(2)	(3)	(4)	(5)	(6)	(7)	Total
	Oral cavity	Larynx	Hypo-pharynx	Oro-pharynx	Naso-pharynx	Nasal cavity, <i>etc.</i>	Maxillary sinus	
Neoplasm, malign.	3	1	1	1	0	2	2	10
Carcinoma, NOS	1	0	0	2	6	2	3	14
Ca., undiff., NOS	1	0	1	5	15	2	3	27
Verrucous ca., NOS	12	2	0	0	0	0	0	14
Papillary S.C.C.	1	1	0	0	2	0	2	6
S.C.C. in situ, NOS	6	8	1	3	1	1	0	20
S.C.C., NOS	555	445	366	238	54	26	97	1781
S.C.C., kerat., NOS	75	41	9	21	0	0	7	153
S.C.C., large cell, nonkerat.	1	5	6	3	0	0	1	16
S.C.C., small cell, nonkerat.	1	2	5	4	1	2	1	16
S.C.C., spindle cell	1	1	0	1	0	1	1	5
S.C.C. in situ with quest. stromal inv.	1	1	0	0	0	0	0	2
Basal cell ca., NOS	1	0	0	0	0	0	0	1
Transitional cell ca., NOS	0	0	0	0	0	1	0	1
Adenocarcinoma, NOS	3	0	0	1	3	1	1	9
Adenoid cystic ca.	10	1	0	2	2	1	12	28
Carcinoid tumor, NOS	0	1	0	0	0	0	0	1
Mucoepidermoid ca.	7	1	0	1	1	0	1	11
Acinar cell ca.	1	0	0	0	0	0	0	1
Adenosquamous ca.	1	3	0	0	0	0	0	4
Malign. melanoma, NOS	4	0	0	2	1	7	6	20
Giant cell sarcoma	0	1	0	0	0	0	0	1
Fibrous histiocytoma, malign.	1	0	0	0	0	0	0	1
Rhabdomyosarcoma, NOS	0	0	0	0	0	2	0	2
Mixed tumor, malign., NOS	0	0	0	1	1	0	0	2
Carcinosarcoma, NOS	0	0	0	0	0	0	1	1
Osteosarcoma, NOS	1	0	0	0	0	0	0	1
Chondrosarcoma, NOS	0	0	0	0	0	1	1	2
Esthesioneuroblastoma	0	0	0	0	0	6	0	6
Malign. lymphoma, NOS	1	0	0	3	1	1	0	6
Plasmacytoma, NOS	0	0	0	2	0	0	0	2
Total	688	514	389	290	88	56	139	2164

Nasal cavity, *etc.* : nasal cavity and paranasal sinuses (excluding the maxillary sinus).

Malign., malign. : malignant.

NOS: not otherwise specified.

Ca., ca. : carcinoma.

undiff. : undifferentiated.

S.C.C. : squamous cell carcinoma.

kerat. : keratinizing.

nonkerat. : nonkeratinizing.

quest. : questionable.

inv. : invasion.

## Head and Neck Carcinoma ----- 2164 Cases

## Histological Distribution by Primary Site (Male)

Histologic type	(1)	(2)	(3)	(4)	(5)	(6)	(7)	Total
	Oral cavity	Larynx	Hypo-pharynx	Oro-pharynx	Naso-pharynx	Nasal cavity, <i>etc.</i>	Maxillary sinus	
Neoplasm, malig.	2	1	1	1	0	2	1	8
Carcinoma, NOS	1	0	0	2	4	1	2	10
Ca., undiff., NOS	0	0	1	5	9	1	1	17
Verrucous ca., NOS	6	1	0	0	0	0	0	7
Papillary S.C.C.	0	1	0	0	2	0	2	5
S.C.C. in situ, NOS	3	6	1	2	1	1	0	14
S.C.C., NOS	371	412	342	205	48	22	75	1475
S.C.C., kerat., NOS	50	37	5	18	0	0	4	114
S.C.C., large cell, nonkerat.	1	4	5	3	0	0	1	14
S.C.C., small cell, nonkerat.	1	2	5	3	1	1	1	14
S.C.C., spindle cell	1	0	0	1	0	1	1	4
S.C.C. in situ with quest. stromal inv.	1	1	0	0	0	0	0	2
Basal cell ca., NOS	0	0	0	0	0	0	0	0
Transitional cell ca., NOS	0	0	0	0	0	0	0	0
Adenocarcinoma, NOS	1	0	0	0	0	1	0	2
Adenoid cystic ca.	6	1	0	1	1	0	8	17
Carcinoid tumor, NOS	0	0	0	0	0	0	0	0
Mucoepidermoid ca.	2	0	0	0	1	0	1	4
Acinar cell ca.	0	0	0	0	0	0	0	0
Adenosquamous ca.	0	3	0	0	0	0	0	3
Malig. melanoma, NOS	3	0	0	2	1	2	4	12
Giant cell sarcoma	0	1	0	0	0	0	0	1
Fibrous histiocytoma, malig.	0	0	0	0	0	0	0	0
Rhabdomyosarcoma, NOS	0	0	0	0	0	2	0	2
Mixed tumor, malig., NOS	0	0	0	1	0	0	0	1
Carcinosarcoma, NOS	0	0	0	0	0	0	1	1
Osteosarcoma, NOS	0	0	0	0	0	0	0	0
Chondrosarcoma, NOS	0	0	0	0	0	0	0	0
Esthesioneuroblastoma	0	0	0	0	0	4	0	4
Malig. lymphoma, NOS	0	0	0	2	0	1	0	3
Plasmacytoma, NOS	0	0	0	1	0	0	0	1
Total	449	470	360	247	68	39	102	1735

Nasal cavity, *etc.* : nasal cavity and paranasal sinuses (excluding the maxillary sinus).

Malig., malig. : malignant.

NOS: not otherwise specified.

Ca., ca. : carcinoma.

undiff. : undifferentiated.

S.C.C. : squamous cell carcinoma.

kerat. : keratinizing.

nonkerat. : nonkeratinizing.

quest. : questionable.

inv. : invasion.

## Head and Neck Carcinoma ----- 2164 Cases

## Histological Distribution by Primary Site (Female)

Histologic type	(1)	(2)	(3)	(4)	(5)	(6)	(7)	Total
	Oral cavity	Larynx	Hypo-pharynx	Oro-pharynx	Naso-pharynx	Nasal cavity, <i>etc.</i>	Maxillary sinus	
Neoplasm, malign.	1	0	0	0	0	0	1	2
Carcinoma, NOS	0	0	0	0	2	1	1	4
Ca., undiff., NOS	1	0	0	0	6	1	2	10
Verrucous ca., NOS	6	1	0	0	0	0	0	7
Papillary S.C.C.	1	0	0	0	0	0	0	1
S.C.C. in situ, NOS	3	2	0	1	0	0	0	6
S.C.C., NOS	184	32	24	33	6	4	22	305
S.C.C., kerat., NOS	25	4	4	3	0	0	3	39
S.C.C., large cell, nonkerat.	0	1	1	0	0	0	0	2
S.C.C., small cell, nonkerat.	0	0	0	1	0	1	0	2
S.C.C., spindle cell	0	1	0	0	0	0	0	1
S.C.C. in situ with quest. stromal inv.	0	0	0	0	0	0	0	0
Basal cell ca., NOS	1	0	0	0	0	0	0	1
Transitional cell ca., NOS	0	0	0	0	0	1	0	1
Adenocarcinoma, NOS	2	0	0	1	3	0	1	7
Adenoid cystic ca.	4	0	0	1	1	1	4	11
Carcinoid tumor, NOS	0	1	0	0	0	0	0	1
Mucoepidermoid ca.	5	1	0	1	0	0	0	7
Acinar cell ca.	1	0	0	0	0	0	0	1
Adenosquamous ca.	1	0	0	0	0	0	0	1
Malign. melanoma, NOS	1	0	0	0	0	5	2	8
Giant cell sarcoma	0	0	0	0	0	0	0	0
Fibrous histiocytoma, malign.	1	0	0	0	0	0	0	1
Rhabdomyosarcoma, NOS	0	0	0	0	0	0	0	0
Mixed tumor, malign., NOS	0	0	0	0	1	0	0	1
Carcinosarcoma, NOS	0	0	0	0	0	0	0	0
Osteosarcoma, NOS	1	0	0	0	0	0	0	1
Chondrosarcoma, NOS	0	0	0	0	0	1	1	2
Esthesioneuroblastoma	0	0	0	0	0	2	0	2
Malign. lymphoma, NOS	1	0	0	1	1	0	0	3
Plasmacytoma, NOS	0	0	0	1	0	0	0	1
Total	239	43	29	43	20	17	37	428

Nasal cavity, *etc.* : nasal cavity and paranasal sinuses (excluding the maxillary sinus).

Malign., malign. : malignant.

NOS: not otherwise specified.

Ca., ca. : carcinoma.

undiff. : undifferentiated.

S.C.C. : squamous cell carcinoma.

kerat. : keratinizing.

nonkerat. : nonkeratinizing.

quest. : questionable.

inv. : invasion.

## Head and Neck Carcinoma ----- 2164 Cases

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	3	0	0	0	0	0	0	0	0	3
T1	416	23	7	10	18	6	2	0	0	482
T2	470	81	7	26	96	55	21	2	0	758
T3	188	72	2	21	103	57	9	0	0	452
T4	151	50	8	11	94	79	13	3	0	409
TX	9	1	0	0	3	1	1	4	0	19
T-	32	0	1	0	0	1	0	0	7	41
Total	1269	227	25	68	314	199	46	9	7	2164

T-: T classification not defined.

N-: N classification not defined.

## T and N Status (M0 Cases)

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	3	0	0	0	0	0	0	0	0	3
T1	410	22	6	9	18	6	1	0	0	472
T2	450	79	7	25	93	50	20	1	0	725
T3	179	69	2	19	100	53	9	0	0	431
T4	138	46	6	11	85	71	10	0	0	367
TX	7	1	0	0	2	1	1	1	0	13
T-	29	0	0	0	0	0	0	0	0	29
Total	1216	217	21	64	298	181	41	2	0	2040

T-: T classification not defined.

N-: N classification not defined.

## Head and Neck Carcinoma ----- 2164 Cases

## T and N Status (M1 Cases)

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	0	1	1	0	0	0	1	0	0	3
T2	2	0	0	1	0	3	0	1	0	7
T3	2	2	0	1	0	2	0	0	0	7
T4	3	2	2	0	4	6	2	0	0	19
TX	1	0	0	0	0	0	0	1	0	2
T-	1	0	0	0	0	1	0	0	0	2
Total	9	5	3	2	4	12	3	2	0	40

T-: T classification not defined.

N-: N classification not defined.

## T and N Status (MX Cases)

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	6	0	0	1	0	0	0	0	0	7
T2	18	2	0	0	3	2	1	0	0	26
T3	7	1	0	1	3	2	0	0	0	14
T4	10	2	0	0	5	2	1	3	0	23
TX	1	0	0	0	1	0	0	2	0	4
T-	2	0	1	0	0	0	0	0	7	10
Total	44	5	1	2	12	6	2	5	7	84

T-: T classification not defined.

N-: N classification not defined.

## Head and Neck Carcinoma ----- 2164 Cases

## Treatment Method for the Primary Lesion by Primary Site

Treatment method	(1) Oral cavity	(2) Larynx	(3) Hypo- pharynx	(4) Oro- pharynx	(5) Naso- pharynx	(6) Nasal cavity, <i>etc.</i>	(7) Maxil- lary sinus	Total
Surgery								
0) Without	127	331	163	182	79	26	42	950
1) With	561	183	226	108	9	30	97	1214
9) Unknown	0	0	0	0	0	0	0	0
Radiotherapy								
0) Without	450	103	122	64	8	20	21	788
1) With	235	410	266	226	79	36	118	1370
9) Unknown	3	1	1	0	1	0	0	6
Chemotherapy								
0) Without	493	375	186	149	23	28	42	1296
1) With	192	137	203	141	64	28	97	862
9) Unknown	3	2	0	0	1	0	0	6
Total	688	514	389	290	88	56	139	2164

Nasal cavity, *etc.* : nasal cavity and paranasal sinuses (excluding the maxillary sinus).

## Treatment Method for the Cervical Lymph Nodes by Primary Site

Treatment method	(1) Oral cavity	(2) Larynx	(3) Hypo- pharynx	(4) Oro- pharynx	(5) Naso- pharynx	(6) Nasal cavity, <i>etc.</i>	(7) Maxil- lary sinus	Total
Surgery								
0) Without	380	395	141	177	78	50	107	1328
1) With	303	117	247	113	10	6	29	825
9) Unknown	5	2	1	0	0	0	3	11
Radiotherapy								
0) Without	535	391	145	110	18	53	113	1365
1) With	140	108	235	170	69	2	23	747
9) Unknown	13	15	9	10	1	1	3	52
Chemotherapy								
0) Without	544	446	211	169	31	48	112	1561
1) With	139	67	176	121	57	8	26	594
9) Unknown	5	1	2	0	0	0	1	9
Total	688	514	389	290	88	56	139	2164

Nasal cavity, *etc.* : nasal cavity and paranasal sinuses (excluding the maxillary sinus).

## Head and Neck Carcinoma ----- 2164 Cases

## Sequence of Treatment Methods for the Primary Lesion by Primary Site

Sequence of treatment methods	(1) Oral cavity	(2) Larynx	(3) Hypo- pharynx	(4) Oro- pharynx	(5) Naso- pharynx	(6) Nasal cavity, <i>etc.</i>	(7) Maxillary sinus	Total
No treatment	22	8	15	13	3	4	8	73
A) Surg. alone	354	85	84	38	4	8	9	582
B) Rad. alone	53	223	45	65	13	10	5	414
F) (Rad. +Chem.)	22	78	68	59	31	5	14	277
AB) Surg. ->Rad.	29	36	25	20	1	2	11	124
FA) (Rad. +Chem.)->Surg.	35	13	20	17	0	4	26	115
BA) Rad. ->Surg.	32	24	17	13	2	4	8	100
CB) Chem. ->Rad.	11	6	14	22	12	4	3	72
CA) Chem. ->Surg.	46	3	11	1	0	1	0	62
CAB) Chem. ->Surg. ->Rad.	10	2	14	5	0	1	4	36
C) Chem. alone	7	4	3	9	1	2	3	29
ABC) Surg. ->Rad. ->Chem.	9	1	12	2	0	0	3	27
BC) Rad. ->Chem.	4	6	3	2	8	1	1	25
AC) Surg. ->Chem.	8	1	8	3	0	2	1	23
AF) Surg. ->(Rad. +Chem.)	3	5	6	3	0	2	3	22
FC) (Rad. +Chem.)->Chem.	2	3	1	5	4	0	5	20
CF) Chem. ->(Rad. +Chem.)	2	1	9	5	1	0	1	19
FAB) (Rad. +Chem.)->Surg. ->Rad.	3	1	5	0	1	0	9	19
BAC) Rad. ->Surg. ->Chem.	4	2	6	1	0	0	2	15
CAC) Chem. ->Surg. ->Chem.	6	1	1	0	0	3	0	11
CBA) Chem. ->Rad. ->Surg.	1	5	2	1	1	0	0	10
Others	24	5	20	6	6	3	23	87
Unknown	1	1	0	0	0	0	0	2
Total	688	514	389	290	88	56	139	2164

Nasal cavity, *etc.* : nasal cavity and paranasal sinuses (excluding the maxillary sinus).

Surg. : surgery.

Rad. : radiotherapy.

Chem. : chemotherapy.

Treatment methods in parentheses were given concurrently.

## Head and Neck Carcinoma ----- 2164 Cases

## Surgical Method for the Primary Lesion by Primary Site

Surgical method		(1) Oral cavity	(2) Larynx	(3) Hypo- pharynx	(4) Oro- pharynx	(5) Naso- pharynx	(6) Nasal cavity, <i>etc.</i>	(7) Maxillary sinus	Total
H0)	No surgery	127	331	163	182	79	26	42	950
A1)	Partial glossectomy	220	0	0	1	0	0	1	222
C4)	Total laryngectomy	0	79	1	0	0	0	0	80
E1)	Partial maxillectomy	34	0	0	1	0	7	27	69
D2C4H6)	Pharyngolaryngoesophagectomy	0	0	57	0	0	0	0	57
A2)	Hemiglossectomy	52	0	0	0	0	0	0	52
E3)	Total maxillectomy	2	0	0	0	0	2	36	40
C9)	Laryngectomy, other type	0	30	0	0	0	0	0	30
D2C4)	Total pharyngolaryngectomy	0	0	29	0	0	0	0	29
D1)	Partial hypopharyngectomy	1	0	25	1	0	0	0	27
C2)	Partial laryngectomy	0	24	0	0	0	0	0	24
A3)	Subtotal glossectomy	23	0	0	0	0	0	0	23
C4G2)	Total laryngectomy with thyroid lobectomy	0	22	1	0	0	0	0	23
H2)	Resection of the floor of mouth	22	0	0	0	0	0	0	22
H4)	Resection of the buccal mucosa	22	0	0	0	0	0	0	22
B3)	Unilateral resection of the lateral wall of the oropharynx	0	0	0	19	0	0	0	19
D2)	Total hypopharyngectomy	0	0	17	0	0	0	0	17
D2C4G2)	Total pharyngolaryngectomy with thyroid lobectomy	0	0	17	0	0	0	0	17
H9)+	Others	182	28	78	86	9	21	33	437
	Unknown	3	0	1	0	0	0	0	4
Total		688	514	389	290	88	56	139	2164

Nasal cavity, *etc.* : nasal cavity and paranasal sinuses (excluding the maxillary sinus).



## Head and Neck Carcinoma ----- 2164 Cases

## Neck Dissection on the Ipsilateral Side by Primary Site

Neck dissection	(1) Oral cavity	(2) Larynx	(3) Hypo- pharynx	(4) Oro- pharynx	(5) Naso- pharynx	(6) Nasal cavity, <i>etc.</i>	(7) Maxil- lary sinus	Total
0) No N.D.	381	395	141	177	78	50	107	1329
1) Radical N.D.	70	26	97	45	1	1	7	247
2) Conservative N.D.	138	64	136	60	6	2	7	413
3) Upper N.D.	64	2	1	0	0	2	8	77
4) Partial N.D.	19	17	11	5	1	1	5	59
5) Enucleation	8	4	1	1	2	0	1	17
8) Others	0	3	0	1	0	0	0	4
9) Unknown	8	3	2	1	0	0	4	18
Total	688	514	389	290	88	56	139	2164

Nasal cavity, *etc.* : nasal cavity and paranasal sinuses (excluding the maxillary sinus).

N.D. : neck dissection.

## Neck Dissection on the Contralateral Side by Primary Site

Neck dissection	(1) Oral cavity	(2) Larynx	(3) Hypo- pharynx	(4) Oro- pharynx	(5) Naso- pharynx	(6) Nasal cavity, <i>etc.</i>	(7) Maxil- lary sinus	Total
0) No N.D.	592	448	204	250	87	56	131	1768
1) Radical N.D.	3	3	13	2	0	0	1	22
2) Conservative N.D.	32	39	138	26	1	0	0	236
3) Upper N.D.	25	0	2	5	0	0	1	33
4) Partial N.D.	20	12	24	4	0	0	1	61
5) Enucleation	1	2	2	0	0	0	0	5
8) Others	0	3	0	2	0	0	0	5
9) Unknown	15	7	6	1	0	0	5	34
Total	688	514	389	290	88	56	139	2164

Nasal cavity, *etc.* : nasal cavity and paranasal sinuses (excluding the maxillary sinus).

N.D. : neck dissection.

## Head and Neck Carcinoma ----- 2164 Cases

## Reconstructive Surgery by Primary Site

Reconstructive surgery	(1) Oral cavity	(2) Larynx	(3) Hypo- pharynx	(4) Oro- pharynx	(5) Naso- pharynx	(6) Nasal cavity, <i>etc.</i>	(7) Maxillary sinus	Total
0) No reconstruction	408	489	182	218	86	42	87	1512
B) Free jejunal flap	0	5	142	4	0	0	0	151
D) Free RA MC flap	64	3	4	35	0	5	25	136
C) Free FA flap	81	2	24	17	1	3	2	130
1) Skin graft	45	1	0	2	0	1	14	63
5) PM MC flap	18	2	9	6	0	0	0	35
2) Local skin flap	15	2	2	1	0	1	1	22
E) Free anterolateral thigh flap	11	0	1	4	0	0	1	17
C1) Free FA flap + skin graft	7	0	1	0	0	0	1	9
3) Mucosal flap	3	2	1	0	1	0	0	7
4) DP flap	3	3	0	1	0	0	0	7
F) Free scapular OC flap	0	2	2	0	0	0	2	6
G) Free fibular OC flap	6	0	0	0	0	0	0	6
7) Gastric pullup	0	1	4	0	0	0	0	5
D8) Free RA MC flap + others	1	0	0	0	0	0	4	5
8)+ Others	23	2	17	2	0	3	2	49
9) Unknown	3	0	0	0	0	1	0	4
Total	688	514	389	290	88	56	139	2164

Nasal cavity, *etc.* : nasal cavity and paranasal sinuses (excluding the maxillary sinus).

RA: rectus abdominis.

MC: musculocutaneous.

FA: forearm.

PM: pectoralis major.

DP: deltopectoral.

OC: osteocutaneous.

## Head and Neck Carcinoma ----- 2164 Cases

## Radiotherapy by Primary Site

Type of radiotherapy	(1) Oral cavity	(2) Larynx	(3) Hypo- pharynx	(4) Oro- pharynx	(5) Naso- pharynx	(6) Nasal cavity, <i>etc.</i>	(7) Maxillary sinus	Total
0) No radiotherapy	433	100	111	63	8	20	21	756
1) X-ray	157	390	239	213	70	32	104	1205
3) Electron beam	25	8	12	8	4	0	7	64
2) <sup>60</sup> Co $\gamma$ -ray	13	5	13	1	0	0	3	35
13) X-ray + electron beam	6	2	7	2	4	1	0	22
D) LDR B. T. with <sup>198</sup> Au	8	0	0	0	0	0	0	8
B) LDR B. T. with <sup>137</sup> Cs	7	0	0	0	0	0	0	7
21) <sup>60</sup> Co $\gamma$ -ray + X-ray	0	2	0	0	1	0	1	4
6) HDR B. T. with <sup>192</sup> Ir	2	0	0	1	0	0	0	3
B1) LDR B. T. with <sup>137</sup> Cs + X-ray	3	0	0	0	0	0	0	3
16) X-ray + HDR B. T. with <sup>192</sup> Ir	1	0	0	1	0	0	0	2
1D) X-ray + LDR B. T. with <sup>198</sup> Au	2	0	0	0	0	0	0	2
7) HDR B. T. with <sup>60</sup> Co	0	0	2	0	0	0	0	2
A) LDR B. T. with <sup>192</sup> Ir	2	0	0	0	0	0	0	2
A2) LDR B. T. with <sup>192</sup> Ir + <sup>60</sup> Co $\gamma$ -ray	2	0	0	0	0	0	0	2
D1) LDR B. T. with <sup>198</sup> Au + X-ray	2	0	0	0	0	0	0	2
8)+ Others	15	0	1	0	0	2	1	19
9) Unknown	10	7	4	1	1	1	2	26
Total	688	514	389	290	88	56	139	2164

Nasal cavity, *etc.* : nasal cavity and paranasal sinuses (excluding the maxillary sinus).

LDR: low dose rate.

B. T. : brachytherapy.

HDR: high dose rate.

## Head and Neck Carcinoma ----- 2164 Cases

## Chemotherapy by Primary Site

Route of Administration	(1) Oral cavity	(2) Larynx	(3) Hypo- pharynx	(4) Oro- pharynx	(5) Naso- pharynx	(6) Nasal cavity, <i>etc.</i>	(7) Maxillary sinus	Total
0) No chemotherapy	493	375	186	149	23	28	42	1296
1) Intravenous	121	115	174	119	61	18	36	644
2) Intraarterial	25	2	7	13	1	7	56	111
3) Oral	39	16	16	9	2	2	4	88
8) Others	4	0	0	0	0	0	0	4
9) Unknown	6	6	6	0	1	1	1	21
Total	688	514	389	290	88	56	139	2164

Nasal cavity, *etc.* : nasal cavity and paranasal sinuses (excluding the maxillary sinus).

Oral Cavity (2002)

688 Cases

## Carcinoma of the Oral Cavity ----- 688 Cases

## Subsite

Subsite	Number of patients
1) Lip	10 ( 1.5%)
2) Buccal mucosa	49 ( 7.1%)
3) Retromolar area	14 ( 2.0%)
4) Lower gingiva	79 ( 11.5%)
5) Upper gingiva	41 ( 6.0%)
6) Hard palate	21 ( 3.1%)
7) Floor of mouth	66 ( 9.6%)
8) Tongue	407 ( 59.2%)
9) Oral cavity, NOS	1 ( 0.1%)
Total	688 (100.0%)

NOS: not otherwise specified.

## Carcinoma of the Oral Cavity ----- 688 Cases

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	9	7	0	16
30 - 39	15	16	0	31
40 - 49	33	17	0	50
50 - 59	119	35	0	154
60 - 69	143	60	0	203
70 - 79	105	68	0	173
80 - 89	23	31	0	54
90 -	2	5	0	7
Unknown	0	0	0	0
Total	449	239	0	688

## Carcinoma of the Lip

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	0	0	0	0
30 - 39	0	0	0	0
40 - 49	0	0	0	0
50 - 59	0	1	0	1
60 - 69	0	1	0	1
70 - 79	3	3	0	6
80 - 89	1	1	0	2
90 -	0	0	0	0
Unknown	0	0	0	0
Total	4	6	0	10

## Carcinoma of the Oral Cavity ----- 688 Cases

## Carcinoma of the Buccal Mucosa

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	0	0	0	0
30 - 39	0	0	0	0
40 - 49	0	1	0	1
50 - 59	7	2	0	9
60 - 69	14	7	0	21
70 - 79	6	7	0	13
80 - 89	2	3	0	5
90 -	0	0	0	0
Unknown	0	0	0	0
Total	29	20	0	49

## Carcinoma of the Retromolar Area

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	0	0	0	0
30 - 39	1	0	0	1
40 - 49	0	0	0	0
50 - 59	3	1	0	4
60 - 69	8	0	0	8
70 - 79	1	0	0	1
80 - 89	0	0	0	0
90 -	0	0	0	0
Unknown	0	0	0	0
Total	13	1	0	14



## Carcinoma of the Oral Cavity ----- 688 Cases

## Carcinoma of the Lower Gingiva

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	1	1	0	2
30 - 39	2	2	0	4
40 - 49	2	2	0	4
50 - 59	7	8	0	15
60 - 69	11	9	0	20
70 - 79	10	11	0	21
80 - 89	5	5	0	10
90 -	2	1	0	3
Unknown	0	0	0	0
Total	40	39	0	79

## Carcinoma of the Upper Gingiva

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	0	0	0	0
30 - 39	0	0	0	0
40 - 49	0	1	0	1
50 - 59	6	0	0	6
60 - 69	5	5	0	10
70 - 79	12	6	0	18
80 - 89	2	4	0	6
90 -	0	0	0	0
Unknown	0	0	0	0
Total	25	16	0	41

## Carcinoma of the Oral Cavity ----- 688 Cases

## Carcinoma of the Hard Palate

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	0	1	0	1
30 - 39	0	0	0	0
40 - 49	0	0	0	0
50 - 59	1	1	0	2
60 - 69	2	5	0	7
70 - 79	4	4	0	8
80 - 89	1	1	0	2
90 -	0	1	0	1
Unknown	0	0	0	0
Total	8	13	0	21

## Carcinoma of the Floor of Mouth

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	0	0	0	0
30 - 39	0	0	0	0
40 - 49	5	2	0	7
50 - 59	23	0	0	23
60 - 69	14	3	0	17
70 - 79	10	5	0	15
80 - 89	2	1	0	3
90 -	0	1	0	1
Unknown	0	0	0	0
Total	54	12	0	66

## Carcinoma of the Oral Cavity ----- 688 Cases

## Carcinoma of the Tongue

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	8	5	0	13
30 - 39	12	14	0	26
40 - 49	26	11	0	37
50 - 59	72	22	0	94
60 - 69	89	30	0	119
70 - 79	58	32	0	90
80 - 89	10	16	0	26
90 -	0	2	0	2
Unknown	0	0	0	0
Total	275	132	0	407

## Carcinoma of the Oral Cavity, NOS

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	0	0	0	0
30 - 39	0	0	0	0
40 - 49	0	0	0	0
50 - 59	0	0	0	0
60 - 69	0	0	0	0
70 - 79	1	0	0	1
80 - 89	0	0	0	0
90 -	0	0	0	0
Unknown	0	0	0	0
Total	1	0	0	1

NOS: not otherwise specified.

Carcinoma of the Oral Cavity ----- 688 Cases  
**Histological Distribution by Subsite**

Histologic type	(1) Lip	(2) Buccal mucosa	(3) Retro- molar area	(4) Lower gingiva	(5) Upper gingiva	(6) Hard palate	(7) Floor of mouth	(8) Tongue	(9) Oral cavity, NOS	Total
Neoplasm, malig.	0	0	0	1	2	0	0	0	0	3
Carcinoma, NOS	0	0	0	0	0	0	0	1	0	1
Ca., undiff., NOS	0	0	0	0	1	0	0	0	0	1
Verrucous ca., NOS	0	0	0	2	4	0	0	6	0	12
Papillary S.C.C.	0	0	0	1	0	0	0	0	0	1
S.C.C. in situ, NOS	0	0	0	1	0	0	0	5	0	6
S.C.C., NOS	8	38	11	56	30	13	51	347	1	555
S.C.C., kerat., NOS	1	6	1	11	2	0	10	44	0	75
S.C.C., large cell, nonkerat.	0	0	0	0	0	0	0	1	0	1
S.C.C., small cell, nonkerat.	0	0	0	0	0	0	0	1	0	1
S.C.C., spindle cell	0	0	0	0	0	0	1	0	0	1
S.C.C. in situ with quest. stromal inv.	0	0	0	0	0	0	0	1	0	1
Basal cell ca., NOS	1	0	0	0	0	0	0	0	0	1
Adenocarcinoma, NOS	0	1	1	0	0	1	0	0	0	3
Adenoid cystic ca.	0	2	1	0	1	2	3	1	0	10
Mucoepidermoid ca.	0	0	0	3	0	3	1	0	0	7
Acinar cell ca.	0	1	0	0	0	0	0	0	0	1
Adenosquamous ca.	0	1	0	0	0	0	0	0	0	1
Malig. melanoma, NOS	0	0	0	2	1	1	0	0	0	4
Fibrous histiocytoma, malig.	0	0	0	1	0	0	0	0	0	1
Osteosarcoma, NOS	0	0	0	1	0	0	0	0	0	1
Malig. lymphoma, NOS	0	0	0	0	0	1	0	0	0	1
Total	10	49	14	79	41	21	66	407	1	688

NOS: not otherwise specified.  
undiff.: undifferentiated.  
nonkerat.: nonkeratinizing.

Malig., malig.: malignant.  
S.C.C.: squamous cell carcinoma.  
quest.: questionable.

Ca., ca.: carcinoma.  
kerat.: keratinizing.  
inv.: invasion.

## Carcinoma of the Oral Cavity ----- 688 Cases

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	169	4	0	2	5	2	0	0	0	182
T2	214 *	33	0	0	34	12	0	0	0	293
T3	49	20 *	0	1	33	8	0	0	0	111
T4	33 *	14	0	3	24 *	25 *	1 *	1	0	101
TX	0	0	0	0	0	0	0	0	0	0
T-	0	0	0	0	0	0	0	0	1	1
Total	465	71	0	6	96	47	1	1	1	688

M1: 6 cases. Each \* signifies one M1 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Lip

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	4	0	0	0	2	0	0	0	0	6
T2	2	1	0	0	0	0	0	0	0	3
T3	0	0	0	0	0	0	0	0	0	0
T4	0	0	0	0	1	0	0	0	0	1
TX	0	0	0	0	0	0	0	0	0	0
T-	0	0	0	0	0	0	0	0	0	0
Total	6	1	0	0	3	0	0	0	0	10

M1: 0 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Oral Cavity ----- 688 Cases

## Carcinoma of the Buccal Mucosa

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	12	0	0	1	0	0	0	0	0	13
T2	17	2	0	0	3	0	0	0	0	22
T3	2	0	0	0	4	0	0	0	0	6
T4	3 *	1	0	0	3	1	0	0	0	8
TX	0	0	0	0	0	0	0	0	0	0
T-	0	0	0	0	0	0	0	0	0	0
Total	34	3	0	1	10	1	0	0	0	49

M1: 1 case. Each \* signifies one M1 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Retromolar Area

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	3	0	0	0	0	0	0	0	0	3
T2	4	1	0	0	1	0	0	0	0	6
T3	0	0	0	0	1	0	0	0	0	1
T4	1	0	0	0	2	1	0	0	0	4
TX	0	0	0	0	0	0	0	0	0	0
T-	0	0	0	0	0	0	0	0	0	0
Total	8	1	0	0	4	1	0	0	0	14

M1: 0 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Oral Cavity ----- 688 Cases

## Carcinoma of the Lower Gingiva

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	13	0	0	0	1	0	0	0	0	14
T2	21 *	4	0	0	3	0	0	0	0	28
T3	2	0	0	0	3	0	0	0	0	5
T4	14	5	0	1	6	5	0	1	0	32
TX	0	0	0	0	0	0	0	0	0	0
T-	0	0	0	0	0	0	0	0	0	0
Total	50	9	0	1	13	5	0	1	0	79

M1: 1 case. Each \* signifies one M1 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Upper Gingiva

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	1	0	0	0	0	0	0	0	0	1
T2	15	3	0	0	0	0	0	0	0	18
T3	8	1	0	1	1	1	0	0	0	12
T4	6	0	0	0	1	3 *	0	0	0	10
TX	0	0	0	0	0	0	0	0	0	0
T-	0	0	0	0	0	0	0	0	0	0
Total	30	4	0	1	2	4	0	0	0	41

M1: 1 case. Each \* signifies one M1 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Oral Cavity ----- 688 Cases

## Carcinoma of the Hard Palate

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	5	0	0	0	0	0	0	0	0	5
T2	8	0	0	0	1	1	0	0	0	10
T3	2	1	0	0	0	0	0	0	0	3
T4	1	0	0	0	1	0	0	0	0	2
TX	0	0	0	0	0	0	0	0	0	0
T-	0	0	0	0	0	0	0	0	1	1
Total	16	1	0	0	2	1	0	0	1	21

M1: 0 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Floor of Mouth

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	8	1	0	0	0	2	0	0	0	11
T2	19	7	0	0	7	3	0	0	0	36
T3	4	2	0	0	3	0	0	0	0	9
T4	2	1	0	0	3	4	0	0	0	10
TX	0	0	0	0	0	0	0	0	0	0
T-	0	0	0	0	0	0	0	0	0	0
Total	33	11	0	0	13	9	0	0	0	66

M1: 0 case.

T-: T classification not defined.

N-: N classification not defined.



## Carcinoma of the Oral Cavity ----- 688 Cases

## Carcinoma of the Tongue

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	123	3	0	1	2	0	0	0	0	129
T2	128	15	0	0	19	8	0	0	0	170
T3	31	16 *	0	0	21	7	0	0	0	75
T4	6	7	0	2	7 *	10	1 *	0	0	33
TX	0	0	0	0	0	0	0	0	0	0
T-	0	0	0	0	0	0	0	0	0	0
Total	288	41	0	3	49	25	1	0	0	407

M1: 3 cases. Each \* signifies one M1 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Oral Cavity, NOS

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	0	0	0	0	0	0	0	0	0	0
T2	0	0	0	0	0	0	0	0	0	0
T3	0	0	0	0	0	0	0	0	0	0
T4	0	0	0	0	0	1	0	0	0	1
TX	0	0	0	0	0	0	0	0	0	0
T-	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	0	0	1

M1: 0 case.

NOS: not otherwise specified.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Oral Cavity ----- 688 Cases

## Treatment Method for the Primary Lesion by Subsite

Treatment method	(1) Lip	(2) Buccal mucosa	(3) Retro- molar area	(4) Lower gingiva	(5) Upper gingiva	(6) Hard palate	(7) Floor of mouth	(8) Tongue	(9) Oral cavity, NOS	Total
Surgery										
0) Without	1	10	2	17	6	4	17	70	0	127
1) With	9	39	12	62	35	17	49	337	1	561
9) Unknown	0	0	0	0	0	0	0	0	0	0
Radiotherapy										
0) Without	9	29	8	58	18	12	34	282	0	450
1) With	1	20	6	21	23	9	31	123	1	235
9) Unknown	0	0	0	0	0	0	1	2	0	3
Chemotherapy										
0) Without	8	38	8	48	27	15	47	301	1	493
1) With	2	11	6	31	14	6	19	103	0	192
9) Unknown	0	0	0	0	0	0	0	3	0	3
Total	10	49	14	79	41	21	66	407	1	688

NOS: not otherwise specified.

## Treatment Method for the Cervical Lymph Nodes by Subsite

Treatment method	(1) Lip	(2) Buccal mucosa	(3) Retro- molar area	(4) Lower gingiva	(5) Upper gingiva	(6) Hard palate	(7) Floor of mouth	(8) Tongue	(9) Oral cavity, NOS	Total
Surgery										
0) Without	6	26	6	37	25	17	27	236	0	380
1) With	4	23	8	42	15	4	38	168	1	303
9) Unknown	0	0	0	0	1	0	1	3	0	5
Radiotherapy										
0) Without	9	40	9	67	29	20	44	317	0	535
1) With	1	9	4	10	9	1	22	83	1	140
9) Unknown	0	0	1	2	3	0	0	7	0	13
Chemotherapy										
0) Without	8	41	10	55	33	18	50	328	1	544
1) With	2	8	4	24	6	3	16	76	0	139
9) Unknown	0	0	0	0	2	0	0	3	0	5
Total	10	49	14	79	41	21	66	407	1	688

NOS: not otherwise specified.

## Carcinoma of the Oral Cavity ----- 688 Cases

## Sequence of Treatment Methods for the Primary Lesion by Subsite

Sequence of treatment methods	(1) Lip	(2) Buccal mucosa	(3) Retro- molar area	(4) Lower gingiva	(5) Upper gingiva	(6) Hard palate	(7) Floor of mouth	(8) Tongue	(9) Oral cavity, NOS	Total
No treatment	0	1	0	7	1	2	1	10	0	22
A) Surg. alone	7	21	5	34	16	9	32	230	0	354
B) Rad. alone	1	7	1	4	3	1	8	28	0	53
CA) Chem. ->Surg.	1	5	1	14	0	0	0	25	0	46
FA) (Rad. +Chem.) ->Surg.	0	0	2	3	8	2	6	14	0	35
BA) Rad. ->Surg.	0	2	1	1	5	1	2	20	0	32
AB) Surg. ->Rad.	0	6	1	2	2	2	3	12	1	29
F) (Rad. +Chem.)	0	1	1	3	1	0	7	9	0	22
CB) Chem. ->Rad.	0	0	0	1	1	0	0	9	0	11
CAB) Chem. ->Surg. ->Rad.	0	1	0	1	0	1	1	6	0	10
ABC) Surg. ->Rad. ->Chem.	0	1	0	2	1	0	0	5	0	9
AC) Surg. ->Chem.	1	1	1	0	0	1	1	3	0	8
C) Chem. alone	0	0	0	0	0	0	0	7	0	7
E) (Surg. +Chem.)	0	1	1	2	0	0	0	3	0	7
CAC) Chem. ->Surg. ->Chem.	0	0	0	1	1	0	0	4	0	6
BAC) Rad. ->Surg. ->Chem.	0	0	0	0	0	1	1	2	0	4
BC) Rad. ->Chem.	0	0	0	0	0	1	0	3	0	4
AF) Surg. -> (Rad. +Chem.)	0	0	0	0	0	0	1	2	0	3
CBCB) Chem. ->Rad. ->Chem. ->Rad.	0	0	0	0	0	0	0	3	0	3
FAB) (Rad. +Chem.) ->Surg. ->Rad.	0	0	0	0	1	0	0	2	0	3
Others	0	2	0	4	1	0	3	9	0	19
Unknown	0	0	0	0	0	0	0	1	0	1
Total	10	49	14	79	41	21	66	407	1	688

NOS: not otherwise specified.

Surg.: surgery.

Rad.: radiotherapy.

Chem.: chemotherapy.

Treatment methods in parentheses were given concurrently.

## Carcinoma of the Oral Cavity ----- 688 Cases

## Surgical Method for the Primary Lesion by Subsite

Surgical method		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Total
		Lip	Buccal mucosa	Retro-molar area	Lower gingiva	Upper gingiva	Hard palate	Floor of mouth	Tongue	Oral cavity, NOS	
H0)	No surgery	1	10	2	17	6	4	17	70	0	127
A1)	Partial glossectomy	1	0	0	0	0	0	1	218	0	220
A2)	Hemiglossectomy	0	0	0	0	0	0	0	52	0	52
E1)	Partial maxillectomy	0	0	0	1	25	8	0	0	0	34
A3)	Subtotal glossectomy	0	0	0	0	0	0	0	23	0	23
H2)	Resection of the floor of mouth	0	0	0	0	0	0	22	0	0	22
H4)	Resection of the buccal mucosa	0	22	0	0	0	0	0	0	0	22
F3)	Segmental mandibulectomy	0	1	1	12	0	0	0	0	0	14
F2)	Marginal mandibulectomy	0	0	0	13	0	0	0	0	0	13
H1)	Resection of the lip	8	0	0	0	0	0	0	0	0	8
A3F2)	Subtotal glossectomy with marginal mandibulectomy	0	0	0	0	0	0	0	7	0	7
H3)	Resection of the lower gingiva	0	0	0	7	0	0	0	0	0	7
H2F2)	Resection of the floor of mouth with marginal mandibulectomy	0	0	0	0	0	0	5	0	0	5
H4F2)	Resection of the buccal mucosa with marginal mandibulectomy	0	5	0	0	0	0	0	0	0	5
H9)+	Others	0	11	11	29	10	8	21	35	1	126
	Unknown	0	0	0	0	0	1	0	2	0	3
Total		10	49	14	79	41	21	66	407	1	688

NOS: not otherwise specified.

## Carcinoma of the Oral Cavity ----- 688 Cases

## Neck Dissection on the Ipsilateral Side by Subsite

Neck dissection	(1) Lip	(2) Buccal mucosa	(3) Retro-molar area	(4) Lower gingiva	(5) Upper gingiva	(6) Hard palate	(7) Floor of mouth	(8) Tongue	(9) Oral cavity, NOS	Total
0) No N.D.	6	26	6	37	25	17	27	237	0	381
1) Radical N.D.	0	4	0	10	6	1	8	41	0	70
2) Conservative N.D.	2	12	4	16	4	1	18	80	1	138
3) Upper N.D.	2	6	4	10	2	2	11	27	0	64
4) Partial N.D.	0	1	0	5	2	0	0	11	0	19
5) Enucleation	0	0	0	1	1	0	1	5	0	8
8) Others	0	0	0	0	0	0	0	0	0	0
9) Unknown	0	0	0	0	1	0	1	6	0	8
Total	10	49	14	79	41	21	66	407	1	688

NOS: not otherwise specified.

N.D.: neck dissection.

## Neck Dissection on the Contralateral Side by Subsite

Neck dissection	(1) Lip	(2) Buccal mucosa	(3) Retro-molar area	(4) Lower gingiva	(5) Upper gingiva	(6) Hard palate	(7) Floor of mouth	(8) Tongue	(9) Oral cavity, NOS	Total
0) No N.D.	9	48	13	71	35	20	46	350	0	592
1) Radical N.D.	0	0	0	0	0	0	0	3	0	3
2) Conservative N.D.	0	0	0	2	4	1	6	18	1	32
3) Upper N.D.	0	0	1	2	1	0	5	16	0	25
4) Partial N.D.	0	0	0	2	0	0	8	10	0	20
5) Enucleation	0	0	0	0	0	0	0	1	0	1
8) Others	0	0	0	0	0	0	0	0	0	0
9) Unknown	1	1	0	2	1	0	1	9	0	15
Total	10	49	14	79	41	21	66	407	1	688

NOS: not otherwise specified.

N.D.: neck dissection.

## Carcinoma of the Oral Cavity ----- 688 Cases

## Reconstructive Surgery by Subsite

Reconstructive surgery	(1) Lip	(2) Buccal mucosa	(3) Retro- molar area	(4) Lower gingiva	(5) Upper gingiva	(6) Hard palate	(7) Floor of mouth	(8) Tongue	(9) Oral cavity, NOS	Total
0) No reconstruction	4	19	6	39	24	16	27	273	0	408
C) Free FA flap	0	7	0	8	1	0	13	52	0	81
D) Free RA MC flap	0	4	5	7	1	0	6	40	1	64
1) Skin graft	1	6	0	3	14	3	6	12	0	45
5) PM MC flap	0	2	1	4	0	0	3	8	0	18
2) Local skin flap	4	1	0	2	1	1	1	5	0	15
E) Free anterolateral thigh flap	0	1	0	0	0	0	3	7	0	11
C1) Free FA flap + skin graft	0	2	0	2	0	0	0	3	0	7
G) Free fibular OC flap	0	0	0	6	0	0	0	0	0	6
3) Mucosal flap	0	2	0	0	0	0	1	0	0	3
4) DP flap	0	1	0	0	0	0	1	1	0	3
8)+ Others	1	4	2	8	0	1	3	5	0	24
9) Unknown	0	0	0	0	0	0	2	1	0	3
Total	10	49	14	79	41	21	66	407	1	688

NOS: not otherwise specified.

MC: musculocutaneous.

DP: deltopectoral.

FA: forearm.

PM: pectoralis major.

RA: rectus abdominis.

OC: osteocutaneous.

## Carcinoma of the Oral Cavity ----- 688 Cases

## Radiotherapy by Subsite

Type of radiotherapy	(1) Lip	(2) Buccal mucosa	(3) Retro- molar area	(4) Lower gingiva	(5) Upper gingiva	(6) Hard palate	(7) Floor of mouth	(8) Tongue	(9) Oral cavity, NOS	Total
0) No radiotherapy	9	27	7	58	15	12	34	271	0	433
1) X-ray	1	11	4	13	17	7	19	84	1	157
3) Electron beam	0	4	2	1	4	1	3	10	0	25
2) <sup>60</sup> Co $\gamma$ -ray	0	0	0	3	3	0	3	4	0	13
D) LDR B.T. with <sup>198</sup> Au	0	3	0	1	1	0	2	1	0	8
B) LDR B.T. with <sup>137</sup> Cs	0	1	0	0	0	0	1	5	0	7
13) X-ray + electron beam	0	0	0	2	0	1	2	1	0	6
B1) LDR B.T. with <sup>137</sup> Cs + X-ray	0	0	0	0	0	0	0	3	0	3
1D) X-ray + LDR B.T. with <sup>198</sup> Au	0	0	0	0	0	0	0	2	0	2
6) HDR B.T. with <sup>192</sup> Ir	0	0	0	0	0	0	1	1	0	2
A) LDR B.T. with <sup>192</sup> Ir	0	0	0	0	0	0	0	2	0	2
A2) LDR B.T. with <sup>192</sup> Ir + <sup>60</sup> Co $\gamma$ -ray	0	0	0	0	0	0	0	2	0	2
D1) LDR B.T. with <sup>198</sup> Au + X-ray	0	1	0	0	0	0	0	1	0	2
8)+ Others	0	1	0	1	1	0	1	12	0	16
9) Unknown	0	1	1	0	0	0	0	8	0	10
Total	10	49	14	79	41	21	66	407	1	688

NOS: not otherwise specified.

LDR: low dose rate.

B. T. : brachytherapy.

HDR: high dose rate.

## Carcinoma of the Oral Cavity ----- 688 Cases

## Chemotherapy by Subsite

Route of Administration	(1) Lip	(2) Buccal mucosa	(3) Retro- molar area	(4) Lower gingiva	(5) Upper gingiva	(6) Hard palate	(7) Floor of mouth	(8) Tongue	(9) Oral cavity, NOS	Total
0) No chemotherapy	8	38	8	48	27	15	47	301	1	493
1) Intravenous	2	7	2	18	4	4	13	71	0	121
2) Intraarterial	0	0	0	1	6	1	2	15	0	25
3) Oral	0	3	3	11	4	0	4	14	0	39
8) Others	0	0	1	1	0	1	0	1	0	4
9) Unknown	0	1	0	0	0	0	0	5	0	6
Total	10	49	14	79	41	21	66	407	1	688

NOS: not otherwise specified.



Larynx (2002)

514 Cases

## Carcinoma of the Larynx ----- 514 Cases

## Subsite

Subsite	Number of patients
Glottis	351 ( 68.3%)
Supraglottis	136 ( 26.5%)
Subglottis	14 ( 2.7%)
Larynx, NOS	13 ( 2.5%)
Total	514 (100.0%)

NOS: not otherwise specified.

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	0	1	0	1
30 - 39	2	1	0	3
40 - 49	22	1	1	24
50 - 59	103	5	0	108
60 - 69	170	14	0	184
70 - 79	146	17	0	163
80 - 89	26	3	0	29
90 -	1	1	0	2
Unknown	0	0	0	0
Total	470	43	1	514

## Carcinoma of the Larynx ----- 514 Cases

## Glottic Carcinoma

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	0	1	0	1
30 - 39	2	0	0	2
40 - 49	17	1	1	19
50 - 59	79	2	0	81
60 - 69	107	11	0	118
70 - 79	103	8	0	111
80 - 89	16	2	0	18
90 -	1	0	0	1
Unknown	0	0	0	0
Total	325	25	1	351

## Supraglottic Carcinoma

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	0	0	0	0
30 - 39	0	0	0	0
40 - 49	3	0	0	3
50 - 59	18	2	0	20
60 - 69	58	2	0	60
70 - 79	35	8	0	43
80 - 89	8	1	0	9
90 -	0	1	0	1
Unknown	0	0	0	0
Total	122	14	0	136

## Carcinoma of the Larynx ----- 514 Cases

## Subglottic Carcinoma

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	0	0	0	0
30 - 39	0	1	0	1
40 - 49	0	0	0	0
50 - 59	3	1	0	4
60 - 69	3	0	0	3
70 - 79	5	0	0	5
80 - 89	1	0	0	1
90 -	0	0	0	0
Unknown	0	0	0	0
Total	12	2	0	14

## Carcinoma of the Larynx, NOS

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	0	0	0	0
30 - 39	0	0	0	0
40 - 49	2	0	0	2
50 - 59	3	0	0	3
60 - 69	2	1	0	3
70 - 79	3	1	0	4
80 - 89	1	0	0	1
90 -	0	0	0	0
Unknown	0	0	0	0
Total	11	2	0	13

NOS: not otherwise specified.

## Carcinoma of the Larynx ----- 514 Cases

## Histological Distribution by Subsite

Histologic type	Glottis (C32.0)	Supraglottis (C32.1)	Subglottis (C32.2)	Larynx, NOS (C32.9)	Total
Neoplasm, malig.	0	0	0	1	1
Verrucous ca., NOS	2	0	0	0	2
Papillary S.C.C.	1	0	0	0	1
S.C.C. in situ, NOS	7	1	0	0	8
S.C.C., NOS	303	122	11	9	445
S.C.C., kerat., NOS	31	9	0	1	41
S.C.C., large cell, nonkerat.	4	1	0	0	5
S.C.C., small cell, nonkerat.	0	2	0	0	2
S.C.C., spindle cell	0	0	0	1	1
S.C.C. in situ with quest. stromal inv.	1	0	0	0	1
Adenoid cystic ca.	0	0	1	0	1
Carcinoid tumor, NOS	1	0	0	0	1
Mucoepidermoid ca.	0	0	1	0	1
Adenosquamous ca.	0	1	1	1	3
Giant cell sarcoma	1	0	0	0	1
Total	351	136	14	13	514

NOS: not otherwise specified.

ca.: carcinoma.

kerat.: keratinizing.

quest.: questionable.

malig.: malignant.

S.C.C.: squamous cell carcinoma.

nonkerat.: nonkeratinizing.

inv.: invasion.

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	3	0	0	0	0	0	0	0	0	3
T1	206	1	0	2	2	0	1	0	0	212
T2	136	14	1	4	13	4	2	0	0	174
T3	50	7	0	1	8	9	1	0	0	76
T4	23 *	6	0	1	8	8	0	0	0	46
TX	0	0	0	0	1	1	0	1	0	3
T-	0	0	0	0	0	0	0	0	0	0
Total	418	28	1	8	32	22	4	1	0	514

M1: 1 case. Each \* signifies one M1 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Larynx ----- 514 Cases

## Glottic Carcinoma

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	3	0	0	0	0	0	0	0	0	3
T1	7	0	0	0	0	0	0	0	0	7
T1a	136	0	0	0	0	0	0	0	0	136
T1b	43	0	0	0	0	0	0	0	0	43
T2	99	4	1	0	2	1	0	0	0	107
T3	31	3	0	1	3	1	1	0	0	40
T4	7	3	0	0	2	2	0	0	0	14
TX	0	0	0	0	1	0	0	0	0	1
T-	0	0	0	0	0	0	0	0	0	0
Total	326	10	1	1	8	4	1	0	0	351

M1: 0 case.

T-: T classification not defined.

N-: N classification not defined.

## Supraglottic Carcinoma

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	18	1	0	2	2	0	1	0	0	24
T2	31	9	0	4	9	3	2	0	0	58
T3	14	4	0	0	5	7	0	0	0	30
T4	11	3	0	0	4	4	0	0	0	22
TX	0	0	0	0	0	1	0	1	0	2
T-	0	0	0	0	0	0	0	0	0	0
Total	74	17	0	6	20	15	3	1	0	136

M1: 0 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Larynx ----- 514 Cases

## Subglottic Carcinoma

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	2	0	0	0	0	0	0	0	0	2
T2	3	1	0	0	0	0	0	0	0	4
T3	1	0	0	0	0	0	0	0	0	1
T4	5 *	0	0	0	0	2	0	0	0	7
TX	0	0	0	0	0	0	0	0	0	0
T-	0	0	0	0	0	0	0	0	0	0
Total	11	1	0	0	0	2	0	0	0	14

M1: 1 case. Each \* signifies one M1 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Larynx, NOS

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	0	0	0	0	0	0	0	0	0	0
T2	3	0	0	0	2	0	0	0	0	5
T3	4	0	0	0	0	1	0	0	0	5
T4	0	0	0	1	2	0	0	0	0	3
TX	0	0	0	0	0	0	0	0	0	0
T-	0	0	0	0	0	0	0	0	0	0
Total	7	0	0	1	4	1	0	0	0	13

M1: 0 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Larynx ----- 514 Cases

## Treatment Method for the Primary Lesion by Subsite

Treatment method	Glottis (C32. 0)	Supraglottis (C32. 1)	Subglottis (C32. 2)	Larynx, NOS (C32. 9)	Total
Surgery					
0) Without	247	77	3	4	331
1) With	104	59	11	9	183
9) Unknown	0	0	0	0	0
Radiotherapy					
0) Without	53	38	8	4	103
1) With	297	98	6	9	410
9) Unknown	1	0	0	0	1
Chemotherapy					
0) Without	270	88	11	6	375
1) With	79	48	3	7	137
9) Unknown	2	0	0	0	2
Total	351	136	14	13	514

NOS: not otherwise specified.

## Sequence of Treatment Methods for the Primary Lesion by Subsite

Sequence of treatment methods	Glottis (C32. 0)	Supraglottis (C32. 1)	Subglottis (C32. 2)	Larynx, NOS (C32. 9)	Total
No treatment	2	5	1	0	8
B) Rad. alone	183	37	2	1	223
A) Surg. alone	48	30	6	1	85
F) (Rad. +Chem.)	54	24	0	0	78
AB) Surg. ->Rad.	25	8	2	1	36
BA) Rad. ->Surg.	13	8	0	3	24
FA) (Rad. +Chem.) ->Surg.	7	6	0	0	13
BC) Rad. ->Chem.	5	1	0	0	6
CB) Chem. ->Rad.	0	6	0	0	6
AF) Surg. -> (Rad. +Chem.)	3	1	1	0	5
CBA) Chem. ->Rad. ->Surg.	3	0	0	2	5
C) Chem. alone	0	2	0	2	4
CA) Chem. ->Surg.	2	0	0	1	3
FC) (Rad. +Chem.) ->Chem.	0	2	0	1	3
Others	5	6	2	1	14
Unknown	1	0	0	0	1
Total	351	136	14	13	514

NOS: not otherwise specified.

Rad.: radiotherapy.

Surg.: surgery.

Chem.: chemotherapy.

Treatment methods in parentheses were given concurrently.



## Carcinoma of the Larynx ----- 514 Cases

## Treatment Method for the Primary Lesion by T Classification

Treatment method	T0	Tis	T1	T2	T3	T4	TX	T-	Total
Surgery									
0) Without	0	2	173	127	19	8	2	0	331
1) With	0	1	39	47	57	38	1	0	183
9) Unknown	0	0	0	0	0	0	0	0	0
Radiotherapy									
0) Without	0	1	24	18	39	19	2	0	103
1) With	0	2	187	156	37	27	1	0	410
9) Unknown	0	0	1	0	0	0	0	0	1
Chemotherapy									
0) Without	0	1	186	98	57	32	1	0	375
1) With	0	2	24	76	19	14	2	0	137
9) Unknown	0	0	2	0	0	0	0	0	2
Total	0	3	212	174	76	46	3	0	514

T-: T classification not defined.

## Sequence of Treatment Methods for the Primary Lesion by T Classification

Sequence of treatment methods	T0	Tis	T1	T2	T3	T4	TX	T-	Total
No treatment	0	0	3	1	1	2	1	0	8
B) Rad. alone	0	0	148	67	7	1	0	0	223
A) Surg. alone	0	1	20	12	35	17	0	0	85
F) (Rad. +Chem.)	0	1	17	50	7	3	0	0	78
AB) Surg. ->Rad.	0	0	14	7	5	10	0	0	36
BA) Rad. ->Surg.	0	0	2	11	9	2	0	0	24
FA) (Rad. +Chem.) ->Surg.	0	0	2	5	2	4	0	0	13
BC) Rad. ->Chem.	0	1	2	3	0	0	0	0	6
CB) Chem. ->Rad.	0	0	0	3	2	1	0	0	6
AF) Surg. -> (Rad. +Chem.)	0	0	1	4	0	0	0	0	5
CBA) Chem. ->Rad. ->Surg.	0	0	0	0	2	2	1	0	5
C) Chem. alone	0	0	1	1	1	0	1	0	4
CA) Chem. ->Surg.	0	0	0	1	2	0	0	0	3
FC) (Rad. +Chem.) ->Chem.	0	0	0	1	1	1	0	0	3
Others	0	0	1	8	2	3	0	0	14
Unknown	0	0	1	0	0	0	0	0	1
Total	0	3	212	174	76	46	3	0	514

T-: T classification not defined.

Rad. : radiotherapy.

Surg. : surgery.

Chem. : chemotherapy.

Treatment methods in parentheses were given concurrently.

## Carcinoma of the Larynx ----- 514 Cases

## Glottic Carcinoma

## Treatment Method for the Primary Lesion by T Classification

Treatment method	T0	Tis	T1	T1a	T1b	T2	T3	T4	TX	T-	Total
Surgery											
0) Without	0	2	4	112	36	85	8	0	0	0	247
1) With	0	1	3	24	7	22	32	14	1	0	104
9) Unknown	0	0	0	0	0	0	0	0	0	0	0
Radiotherapy											
0) Without	0	1	2	13	3	5	23	6	0	0	53
1) With	0	2	5	122	40	102	17	8	1	0	297
9) Unknown	0	0	0	1	0	0	0	0	0	0	1
Chemotherapy											
0) Without	0	1	7	126	34	58	33	11	0	0	270
1) With	0	2	0	8	9	49	7	3	1	0	79
9) Unknown	0	0	0	2	0	0	0	0	0	0	2
Total	0	3	7	136	43	107	40	14	1	0	351

T-: T classification not defined.

## Glottic Carcinoma

## Sequence of Treatment Methods for the Primary Lesion by T Classification

Sequence of treatment methods	T0	Tis	T1	T1a	T1b	T2	T3	T4	TX	T-	Total
No treatment	0	0	0	2	0	0	0	0	0	0	2
B) Rad. alone	0	0	4	102	28	43	6	0	0	0	183
F) (Rad. +Chem.)	0	1	0	5	7	39	2	0	0	0	54
A) Surg. alone	0	1	2	11	3	4	21	6	0	0	48
AB) Surg. ->Rad.	0	0	1	11	2	5	1	5	0	0	25
BA) Rad. ->Surg.	0	0	0	1	1	6	5	0	0	0	13
FA) (Rad. +Chem.) ->Surg.	0	0	0	0	1	3	2	1	0	0	7
BC) Rad. ->Chem.	0	1	0	2	0	2	0	0	0	0	5
AF) Surg. -> (Rad. +Chem.)	0	0	0	1	0	2	0	0	0	0	3
CBA) Chem. ->Rad. ->Surg.	0	0	0	0	0	0	1	1	1	0	3
CA) Chem. ->Surg.	0	0	0	0	0	0	2	0	0	0	2
Others	0	0	0	0	1	3	0	1	0	0	5
Unknown	0	0	0	1	0	0	0	0	0	0	1
Total	0	3	7	136	43	107	40	14	1	0	351

T-: T classification not defined.

Rad.: radiotherapy.

Chem.: chemotherapy.

Surg.: surgery.

Treatment methods in parentheses were given concurrently.

## Carcinoma of the Larynx ----- 514 Cases

## Supraglottic Carcinoma

## Treatment Method for the Primary Lesion by T Classification

Treatment method	T0	Tis	T1	T2	T3	T4	TX	T-	Total
Surgery									
0) Without	0	0	20	39	9	7	2	0	77
1) With	0	0	4	19	21	15	0	0	59
9) Unknown	0	0	0	0	0	0	0	0	0
Radiotherapy									
0) Without	0	0	5	8	14	9	2	0	38
1) With	0	0	19	50	16	13	0	0	98
9) Unknown	0	0	0	0	0	0	0	0	0
Chemotherapy									
0) Without	0	0	17	35	21	14	1	0	88
1) With	0	0	7	23	9	8	1	0	48
9) Unknown	0	0	0	0	0	0	0	0	0
Total	0	0	24	58	30	22	2	0	136

T-: T classification not defined.

## Supraglottic Carcinoma

## Sequence of Treatment Methods for the Primary Lesion by T Classification

Sequence of treatment methods	T0	Tis	T1	T2	T3	T4	TX	T-	Total
No treatment	0	0	1	1	1	1	1	0	5
B) Rad. alone	0	0	13	22	1	1	0	0	37
A) Surg. alone	0	0	3	6	13	8	0	0	30
F) (Rad. +Chem.)	0	0	5	11	5	3	0	0	24
AB) Surg. ->Rad.	0	0	0	2	4	2	0	0	8
BA) Rad. ->Surg.	0	0	0	4	2	2	0	0	8
CB) Chem. ->Rad.	0	0	0	3	2	1	0	0	6
FA) (Rad. +Chem.) ->Surg.	0	0	1	2	0	3	0	0	6
BAC) Rad. ->Surg. ->Chem.	0	0	0	1	1	0	0	0	2
C) Chem. alone	0	0	1	0	0	0	1	0	2
FC) (Rad. +Chem.) ->Chem.	0	0	0	1	0	1	0	0	2
Others	0	0	0	5	1	0	0	0	6
Unknown	0	0	0	0	0	0	0	0	0
Total	0	0	24	58	30	22	2	0	136

T-: T classification not defined.

Rad.: radiotherapy.

Surg.: surgery.

Chem.: chemotherapy.

Treatment methods in parentheses were given concurrently.

## Carcinoma of the Larynx ----- 514 Cases

## Subglottic Carcinoma

## Treatment Method for the Primary Lesion by T Classification

Treatment method	T0	Tis	T1	T2	T3	T4	TX	T-	Total
Surgery									
0) Without	0	0	1	1	0	1	0	0	3
1) With	0	0	1	3	1	6	0	0	11
9) Unknown	0	0	0	0	0	0	0	0	0
Radiotherapy									
0) Without	0	0	1	2	1	4	0	0	8
1) With	0	0	1	2	0	3	0	0	6
9) Unknown	0	0	0	0	0	0	0	0	0
Chemotherapy									
0) Without	0	0	2	2	1	6	0	0	11
1) With	0	0	0	2	0	1	0	0	3
9) Unknown	0	0	0	0	0	0	0	0	0
Total	0	0	2	4	1	7	0	0	14

T-: T classification not defined.

## Subglottic Carcinoma

## Sequence of Treatment Methods for the Primary Lesion by T Classification

Sequence of treatment methods	T0	Tis	T1	T2	T3	T4	TX	T-	Total
No treatment	0	0	0	0	0	1	0	0	1
A) Surg. alone	0	0	1	1	1	3	0	0	6
AB) Surg. ->Rad.	0	0	0	0	0	2	0	0	2
B) Rad. alone	0	0	1	1	0	0	0	0	2
AC) Surg. ->Chem.			0	1	0	0			1
ACB) Surg. ->Chem. ->Rad.	0	0	0	0	0	1	0	0	1
AF) Surg. ->(Rad. +Chem.)			0	1	0	0			1
Others	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0
Total	0	0	2	4	1	7	0	0	14

T-: T classification not defined.

Surg. : surgery.

Rad. : radiotherapy.

Chem. : chemotherapy.

Treatment methods in parentheses were given concurrently.

## Carcinoma of the Larynx ----- 514 Cases

## Carcinoma of the Larynx, NOS

## Treatment Method for the Primary Lesion by T Classification

Treatment method	T0	Tis	T1	T2	T3	T4	TX	T-	Total
Surgery									
0) Without	0	0	0	2	2	0	0	0	4
1) With	0	0	0	3	3	3	0	0	9
9) Unknown	0	0	0	0	0	0	0	0	0
Radiotherapy									
0) Without	0	0	0	3	1	0	0	0	4
1) With	0	0	0	2	4	3	0	0	9
9) Unknown	0	0	0	0	0	0	0	0	0
Chemotherapy									
0) Without	0	0	0	3	2	1	0	0	6
1) With	0	0	0	2	3	2	0	0	7
9) Unknown	0	0	0	0	0	0	0	0	0
Total	0	0	0	5	5	3	0	0	13

NOS: not otherwise specified.

T-: T classification not defined.

## Carcinoma of the Larynx, NOS

## Sequence of Treatment Methods for the Primary Lesion by T Classification

Sequence of treatment methods	T0	Tis	T1	T2	T3	T4	TX	T-	Total
No treatment	0	0	0	0	0	0	0	0	0
BA) Rad. ->Surg.	0	0	0	1	2	0	0	0	3
C) Chem. alone	0	0	0	1	1	0	0	0	2
CBA) Chem. ->Rad. ->Surg.	0	0	0	0	1	1	0	0	2
A) Surg. alone	0	0	0	1	0	0	0	0	1
AB) Surg. ->Rad.	0	0	0	0	0	1	0	0	1
B) Rad. alone	0	0	0	1	0	0	0	0	1
CA) Chem. ->Surg.	0	0	0	1	0	0	0	0	1
FAB) (Rad. +Chem.) ->Surg. ->Rad.	0	0	0	0	0	1	0	0	1
FC) (Rad. +Chem.) ->Chem.	0	0	0	0	1	0	0	0	1
Others	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0
Total	0	0	0	5	5	3	0	0	13

NOS: not otherwise specified.

T-: T classification not defined.

Rad.: radiotherapy.

Surg.: surgery.

Chem.: chemotherapy.

Treatment methods in parentheses were given concurrently.

## Carcinoma of the Larynx ----- 514 Cases

## Surgical Method for the Primary Lesion by Subsite

Surgical method		Glottis (C32.0)	Supraglottis (C32.1)	Subglottis (C32.2)	Larynx, NOS (C32.9)	Total
H0)	No surgery	247	77	3	4	331
C4)	Total laryngectomy	42	28	4	5	79
C9)	Laryngectomy, other type	27	3	0	0	30
C2)	Partial laryngectomy	18	4	2	0	24
C4G2)	Total laryngectomy with thyroid lobectomy	8	12	0	2	22
C4G4)	Total laryngectomy with total thyroidectomy	1	4	2	0	7
C3)	Subtotal laryngectomy	2	1	0	1	4
C4G3)	Total laryngectomy with subtotal thyroidectomy	1	0	1	1	3
C2D1)	Partial laryngectomy with partial hypopharyngectomy	0	2	0	0	2
C4D2H6)	Pharyngolaryngoesophagectomy	1	1	0	0	2
H9)+	Others	4	4	2	0	10
	Unknown	0	0	0	0	0
Total		351	136	14	13	514

NOS: not otherwise specified.

## Carcinoma of the Larynx ----- 514 Cases

## Surgical Method for the Primary Lesion by T Classification

Surgical method		T0	Tis	T1	T2	T3	T4	TX	T-	Total
H0)	No surgery	0	2	173	127	19	8	2	0	331
C4)	Total laryngectomy	0	0	2	23	32	21	1	0	79
C9)	Laryngectomy, other type	0	1	22	7	0	0	0	0	30
C2)	Partial laryngectomy	0	0	12	10	2	0	0	0	24
C4G2)	Total laryngectomy with thyroid lobectomy	0	0	0	3	15	4	0	0	22
C4G4)	Total laryngectomy with total thyroidectomy	0	0	0	1	0	6	0	0	7
C3)	Subtotal laryngectomy	0	0	0	0	3	1	0	0	4
C4G3)	Total laryngectomy with subtotal thyroidectomy	0	0	0	1	0	2	0	0	3
C2D1)	Partial laryngectomy with partial hypopharyngectomy	0	0	0	0	2	0	0	0	2
C4D2H6)	Pharyngolaryngoesophagectomy	0	0	0	1	1	0	0	0	2
H9)+	Others	0	0	3	1	2	4	0	0	10
	Unknown	0	0	0	0	0	0	0	0	0
Total		0	3	212	174	76	46	3	0	514

T-: T classification not defined.

## Carcinoma of the Larynx ----- 514 Cases

## Glottic Carcinoma

## Surgical Method for the Primary Lesion by T Classification

Surgical method		T0	Tis	T1	T1a	T1b	T2	T3	T4	TX	T-	Total
H0)	No surgery	0	2	4	112	36	85	8	0	0	0	247
C4)	Total laryngectomy	0	0	0	0	1	11	19	10	1	0	42
C9)	Laryngectomy, other type	0	1	1	17	3	5	0	0	0	0	27
C2)	Partial laryngectomy	0	0	1	7	2	6	2	0	0	0	18
C4G2)	Total laryngectomy with thyroid lobectomy	0	0	0	0	0	0	7	1	0	0	8
C3)	Subtotal laryngectomy	0	0	0	0	0	0	2	0	0	0	2
H9)+	Others	0	0	1	0	1	0	2	3	0	0	7
	Unknown	0	0	0	0	0	0	0	0	0	0	0
Total		0	3	7	136	43	107	40	14	1	0	351

T-: T classification not defined.



## Carcinoma of the Larynx ----- 514 Cases

## Supraglottic Carcinoma

## Surgical Method for the Primary Lesion by T Classification

Surgical method		T0	Tis	T1	T2	T3	T4	TX	T-	Total
H0)	No surgery	0	0	20	39	9	7	2	0	77
C4)	Total laryngectomy	0	0	1	9	11	7	0	0	28
C4G2)	Total laryngectomy with thyroid lobectomy	0	0	0	3	7	2	0	0	12
C2)	Partial laryngectomy	0	0	1	3	0	0	0	0	4
C4G4)	Total laryngectomy with total thyroidectomy	0	0	0	0	0	4	0	0	4
C9)	Laryngectomy, other type	0	0	1	2	0	0	0	0	3
C2D1)	Partial laryngectomy with partial hypopharyngectomy	0	0	0	0	2	0	0	0	2
H9)+	Others	0	0	1	2	1	2	0	0	6
	Unknown	0	0	0	0	0	0	0	0	0
Total		0	0	24	58	30	22	2	0	136

T-: T classification not defined.

## Carcinoma of the Larynx ----- 514 Cases

## Subglottic Carcinoma

## Surgical Method for the Primary Lesion by T Classification

Surgical method		T0	Tis	T1	T2	T3	T4	TX	T-	Total
H0)	No surgery	0	0	1	1	0	1	0	0	3
C4)	Total laryngectomy	0	0	0	1	1	2	0	0	4
C2)	Partial laryngectomy	0	0	1	1	0	0	0	0	2
C4G4)	Total laryngectomy with total thyroidectomy	0	0	0	1	0	1	0	0	2
H9)+	Others	0	0	0	0	0	3	0	0	3
	Unknown	0	0	0	0	0	0	0	0	0
Total		0	0	2	4	1	7	0	0	14

T-: T classification not defined.

## Carcinoma of the Larynx, NOS

## Surgical Method for the Primary Lesion by T Classification

Surgical method		T0	Tis	T1	T2	T3	T4	TX	T-	Total
H0)	No surgery	0	0	0	2	2	0	0	0	4
C4)	Total laryngectomy	0	0	0	2	1	2	0	0	5
C4G2)	Total laryngectomy with thyroid lobectomy	0	0	0	0	1	1	0	0	2
H9)+	Others	0	0	0	1	1	0	0	0	2
	Unknown	0	0	0	0	0	0	0	0	0
Total		0	0	0	5	5	3	0	0	13

NOS: not otherwise specified.

T-: T classification not defined.

## Carcinoma of the Larynx ----- 514 Cases

## Treatment Method for the Cervical Lymph Nodes by Subsite

Treatment method	Glottis (C32. 0)	Supraglottis (C32. 1)	Subglottis (C32. 2)	Larynx, NOS (C32. 9)	Total
Surgery					
0) Without	298	84	7	6	395
1) With	51	52	7	7	117
9) Unknown	2	0	0	0	2
Radiotherapy					
0) Without	300	70	11	10	391
1) With	40	62	3	3	108
9) Unknown	11	4	0	0	15
Chemotherapy					
0) Without	327	100	12	7	446
1) With	23	36	2	6	67
9) Unknown	1	0	0	0	1
Total	351	136	14	13	514

NOS: not otherwise specified.

## Neck Dissection on the Ipsilateral Side by Subsite

Neck dissection	Glottis (C32. 0)	Supraglottis (C32. 1)	Subglottis (C32. 2)	Larynx, NOS (C32. 9)	Total
0) No N. D.	298	84	7	6	395
1) Radical N. D.	9	12	2	3	26
2) Conservative N. D.	27	31	3	3	64
3) Upper N. D.	2	0	0	0	2
4) Partial N. D.	11	4	2	0	17
5) Enucleation	1	2	0	1	4
8) Others	1	2	0	0	3
9) Unknown	2	1	0	0	3
Total	351	136	14	13	514

NOS: not otherwise specified.

N. D. : neck dissection.

## Carcinoma of the Larynx ----- 514 Cases

## Neck Dissection on the Contralateral Side by Subsite

Neck dissection	Glottis (C32. 0)	Supraglottis (C32. 1)	Subglottis (C32. 2)	Larynx, NOS (C32. 9)	Total
0) No N. D.	324	108	9	7	448
1) Radical N. D.	1	1	0	1	3
2) Conservative N. D.	14	20	2	3	39
3) Upper N. D.	0	0	0	0	0
4) Partial N. D.	6	4	2	0	12
5) Enucleation	0	0	0	2	2
8) Others	1	2	0	0	3
9) Unknown	5	1	1	0	7
Total	351	136	14	13	514

NOS: not otherwise specified.

N. D. : neck dissection.

## Reconstructive Surgery by Subsite

Reconstructive surgery	Glottis (C32. 0)	Supraglottis (C32. 1)	Subglottis (C32. 2)	Larynx, NOS (C32. 9)	Total
0) No reconstruction	342	126	10	11	489
B) Free jejunal flap	2	1	2	0	5
4) DP flap	0	1	0	2	3
D) Free RA MC flap	2	1	0	0	3
2) Local skin flap	2	0	0	0	2
3) Mucosal flap	0	0	2	0	2
5) PM MC flap	0	2	0	0	2
C) Free FA flap	1	1	0	0	2
F) Free scapular OC flap	1	1	0	0	2
8)+ Others	1	3	0	0	4
9) Unknown	0	0	0	0	0
Total	351	136	14	13	514

NOS: not otherwise specified.

DP: deltopectoral.

RA: rectus abdominis.

MC: musculocutaneous.

PM: pectoralis major.

FA: forearm.

OC: osteocutaneous.

## Carcinoma of the Larynx ----- 514 Cases

## Radiotherapy by Subsite

Type of radiotherapy	Glottis (C32.0)	Supraglottis (C32.1)	Subglottis (C32.2)	Larynx, NOS (C32.9)	Total
0) No radiotherapy	53	36	7	4	100
1) X-ray	284	91	7	8	390
3) Electron beam	4	4	0	0	8
2) <sup>60</sup> Co $\gamma$ -ray	4	0	0	1	5
13) X-ray + electron beam	1	1	0	0	2
21) <sup>60</sup> Co $\gamma$ -ray + X-ray	0	2	0	0	2
8)+ Others	0	0	0	0	0
9) Unknown	5	2	0	0	7
Total	351	136	14	13	514

NOS: not otherwise specified.

## Chemotherapy by Subsite

Route of Administration	Glottis (C32.0)	Supraglottis (C32.1)	Subglottis (C32.2)	Larynx, NOS (C32.9)	Total
0) No chemotherapy	270	88	11	6	375
1) Intravenous	66	39	3	7	115
2) Intraarterial	1	1	0	0	2
3) Oral	9	7	0	0	16
8) Others	0	0	0	0	0
9) Unknown	5	1	0	0	6
Total	351	136	14	13	514

NOS: not otherwise specified.

Hypopharynx (2002)

389 Cases

## Carcinoma of the Hypopharynx ----- 389 Cases

## Subsite

Subsite	Number of patients
Posterior wall	34 ( 8.7%)
Pyramidal sinus	277 ( 71.2%)
Posterior wall	56 ( 14.4%)
Hypopharynx, NOS	22 ( 5.7%)
Total	389 (100.0%)

NOS: not otherwise specified.

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	1	0	0	1
30 - 39	2	0	0	2
40 - 49	23	0	0	23
50 - 59	91	5	0	96
60 - 69	141	13	0	154
70 - 79	86	7	0	93
80 - 89	14	4	0	18
90 -	2	0	0	2
Unknown	0	0	0	0
Total	360	29	0	389

## Carcinoma of the Hypopharynx ----- 389 Cases

## Histological Distribution by Subsite

Histologic type	Postcricoid (C13.0)	Pyriiform sinus (C12.9)	Posterior wall (C13.2)	Hypopharynx, NOS (C13.9)	Total
Neoplasm, malig.	0	0	0	1	1
Ca., undiff., NOS	0	1	0	0	1
S.C.C. in situ, NOS	0	1	0	0	1
S.C.C., NOS	32	258	56	20	366
S.C.C., kerat., NOS	2	6	0	1	9
S.C.C., large cell, nonkerat.	0	6	0	0	6
S.C.C., small cell, nonkerat.	0	5	0	0	5
Total	34	277	56	22	389

NOS: not otherwise specified.

Ca.: carcinoma.

S.C.C.: squamous cell carcinoma.

nonkerat.: nonkeratinizing.

malig.: malignant.

undiff.: undifferentiated.

kerat.: keratinizing.

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	20	4	1 *	2	5	3	1 *	0	0	36
T2	41	17	0	11 *	31	19 **	11	2 *	0	132
T3	22	22	0	11	38	30 **	2	0	0	125
T4	15	10 *	0	3	33 **	24 *	9	0	0	94
TX	0	0	0	0	1	0	1	0	0	2
T-	0	0	0	0	0	0	0	0	0	0
Total	98	53	1	27	108	76	24	2	0	389

M1: 12 cases. Each \* signifies one M1 case.

T-: T classification not defined.

N-: N classification not defined.



## Carcinoma of the Hypopharynx ----- 389 Cases

## Treatment Method for the Primary Lesion by Subsite

Treatment method	Postcricoid (C13.0)	Pyriiform sinus (C12.9)	Posterior wall (C13.2)	Hypopharynx, NOS (C13.9)	Total
Surgery					
0) Without	13	118	21	11	163
1) With	21	159	35	11	226
9) Unknown	0	0	0	0	0
Radiotherapy					
0) Without	14	78	23	7	122
1) With	20	198	33	15	266
9) Unknown	0	1	0	0	1
Chemotherapy					
0) Without	16	132	29	9	186
1) With	18	145	27	13	203
9) Unknown	0	0	0	0	0
Total	34	277	56	22	389

NOS: not otherwise specified.

## Treatment Method for the Cervical Lymph Nodes by Subsite

Treatment method	Postcricoid (C13.0)	Pyriiform sinus (C12.9)	Posterior wall (C13.2)	Hypopharynx, NOS (C13.9)	Total
Surgery					
0) Without	10	104	17	10	141
1) With	24	172	39	12	247
9) Unknown	0	1	0	0	1
Radiotherapy					
0) Without	15	94	25	11	145
1) With	18	177	30	10	235
9) Unknown	1	6	1	1	9
Chemotherapy					
0) Without	19	148	32	12	211
1) With	15	128	24	9	176
9) Unknown	0	1	0	1	2
Total	34	277	56	22	389

NOS: not otherwise specified.

## Carcinoma of the Hypopharynx ----- 389 Cases

## Sequence of Treatment Methods for the Primary Lesion by Subsite

Sequence of treatment methods	Postcricoid (C13. 0)	Pyriiform sinus (C12. 9)	Posterior wall (C13. 2)	Hypopharynx, NOS (C13. 9)	Total
No treatment	1	10	1	3	15
A) Surg. alone	9	53	19	3	84
F) (Rad. +Chem.)	4	49	11	4	68
B) Rad. alone	2	36	4	3	45
AB) Surg. ->Rad.	3	20	2	0	25
FA) (Rad. +Chem.) ->Surg.	1	15	3	1	20
BA) Rad. ->Surg.	1	13	3	0	17
CAB) Chem. ->Surg. ->Rad.	1	10	1	2	14
CB) Chem. ->Rad.	2	10	2	0	14
ABC) Surg. ->Rad. ->Chem.	0	11	1	0	12
CA) Chem. ->Surg.	2	8	0	1	11
CF) Chem. ->(Rad. +Chem.)	2	5	2	0	9
AC) Surg. ->Chem.	0	6	2	0	8
AF) Surg. ->(Rad. +Chem.)	1	4	1	0	6
BAC) Rad. ->Surg. ->Chem.	0	6	0	0	6
FAB) (Rad. +Chem.) ->Surg. ->Rad.	2	1	1	1	5
BC) Rad. ->Chem.	0	2	1	0	3
C) Chem. alone	2	1	0	0	3
CFA) Chem. ->(Rad. +Chem.) ->Surg.	0	2	1	0	3
FAC) (Rad. +Chem.) ->Surg. ->Chem.	0	2	0	1	3
Others	1	13	1	3	18
Unknown	0	0	0	0	0
Total	34	277	56	22	389

NOS: not otherwise specified.

Surg. : surgery.

Rad. : radiotherapy.

Chem. : chemotherapy.

Treatment methods in parentheses were given concurrently.

## Carcinoma of the Hypopharynx ----- 389 Cases

## Surgical Method for the Primary Lesion by Subsite

Surgical method		Postericoid (C13.0)	Pyriiform sinus (C12.9)	Posterior wall (C13.2)	Hypopharynx, NOS (C13.9)	Total
H0)	No surgery	13	118	21	11	163
D2C4H6)	Pharyngolaryngoesophagectomy	6	36	10	5	57
D2C4)	Total pharyngolaryngectomy	3	22	4	0	29
D1)	Partial hypopharyngectomy	0	17	8	0	25
D2)	Total hypopharyngectomy	2	12	1	2	17
D2C4G2)	Total pharyngolaryngectomy with thyroid lobectomy	3	11	3	0	17
D2C4G4)	Total pharyngolaryngectomy with total thyroidectomy	0	9	3	0	12
D1C2)	Partial hypopharyngectomy with partial laryngectomy	0	7	0	2	9
D2C4H7)	Total pharyngolaryngectomy with blunt esophagectomy	1	7	1	0	9
C4D2)	Total pharyngolaryngectomy	0	3	0	0	3
D1BA)	Partial hypopharyngectomy with partial resection of the posterior wall of the oropharynx	0	0	3	0	3
D1C4)	Partial hypopharyngectomy with total laryngectomy	0	3	0	0	3
H9)+	Others	6	31	2	2	41
	Unknown	0	1	0	0	1
Total		34	277	56	22	389

NOS: not otherwise specified.

## Carcinoma of the Hypopharynx ----- 389 Cases

## Neck Dissection on the Ipsilateral Side by Subsite

Neck dissection	Postericoid (C13.0)	Pyriform sinus (C12.9)	Posterior wall (C13.2)	Hypopharynx, NOS (C13.9)	Total
0) No N.D.	10	104	17	10	141
1) Radical N.D.	3	72	13	9	97
2) Conservative N.D.	19	90	24	3	136
3) Upper N.D.	0	1	0	0	1
4) Partial N.D.	1	8	2	0	11
5) Enucleation	0	1	0	0	1
8) Others	0	0	0	0	0
9) Unknown	1	1	0	0	2
Total	34	277	56	22	389

NOS: not otherwise specified.

N.D. : neck dissection.

## Neck Dissection on the Contralateral Side by Subsite

Neck dissection	Postericoid (C13.0)	Pyriform sinus (C12.9)	Posterior wall (C13.2)	Hypopharynx, NOS (C13.9)	Total
0) No N.D.	14	153	24	13	204
1) Radical N.D.	1	9	2	1	13
2) Conservative N.D.	13	89	28	8	138
3) Upper N.D.	0	2	0	0	2
4) Partial N.D.	5	18	1	0	24
5) Enucleation	0	2	0	0	2
8) Others	0	0	0	0	0
9) Unknown	1	4	1	0	6
Total	34	277	56	22	389

NOS: not otherwise specified.

N.D. : neck dissection.

## Carcinoma of the Hypopharynx ----- 389 Cases

## Reconstructive Surgery by Subsite

Reconstructive surgery	Postericoid (C13.0)	Pyriform sinus (C12.9)	Posterior wall (C13.2)	Hypopharynx, NOS (C13.9)	Total
0) No reconstruction	15	135	21	11	182
B) Free jejunal flap	17	93	26	6	142
C) Free FA flap	0	18	3	3	24
5) PM MC flap	0	7	1	1	9
7) Gastric pullup	0	3	1	0	4
D) Free RA MC flap	1	2	1	0	4
B7) Free jejunal flap + gastric pullup	0	3	0	0	3
2) Local skin flap	1	1	0	0	2
7B) Gastric pullup + free jejunal flap	0	1	0	1	2
F) Free scapular OC flap	0	2	0	0	2
8)+ Others	0	12	3	0	15
9) Unknown	0	0	0	0	0
Total	34	277	56	22	389

NOS: not otherwise specified.

MC: musculocutaneous.

FA: forearm.

RA: rectus abdominis.

PM: pectoralis major.

OC: osteocutaneous.

## Carcinoma of the Hypopharynx ----- 389 Cases

## Radiotherapy by Subsite

Type of radiotherapy	Postericoid (C13.0)	Pyriiform sinus (C12.9)	Posterior wall (C13.2)	Hypopharynx, NOS (C13.9)	Total
0) No radiotherapy	13	71	20	7	111
1) X-ray	20	176	32	11	239
2) <sup>60</sup> Co $\gamma$ -ray	1	7	3	2	13
3) Electron beam	0	9	1	2	12
13) X-ray + electron beam	0	7	0	0	7
7) HDR B. T. with <sup>60</sup> Co	0	2	0	0	2
8)+ Others	0	1	0	0	1
9) Unknown	0	4	0	0	4
Total	34	277	56	22	389

NOS: not otherwise specified.

HDR: high dose rate.

B. T. : brachytherapy.

## Chemotherapy by Subsite

Route of Administration	Postericoid (C13.0)	Pyriiform sinus (C12.9)	Posterior wall (C13.2)	Hypopharynx, NOS (C13.9)	Total
0) No chemotherapy	16	132	29	9	186
1) Intravenous	16	124	23	11	174
2) Intraarterial	1	5	0	1	7
3) Oral	1	12	3	0	16
8) Others	0	0	0	0	0
9) Unknown	0	4	1	1	6
Total	34	277	56	22	389

NOS: not otherwise specified.

Oropharynx (2002)

290 Cases

## Carcinoma of the Oropharynx ----- 290 Cases

## Subsite

Subsite	Number of patients
Soft palate	26 ( 9.0%)
Lateral wall	176 ( 60.7%)
Posterior wall	15 ( 5.2%)
Base of tongue	64 ( 22.1%)
Oropharynx, NOS	9 ( 3.1%)
Total	290 (100.0%)

NOS: not otherwise specified.

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	0	0	0	0
30 - 39	1	0	0	1
40 - 49	21	5	0	26
50 - 59	69	9	0	78
60 - 69	97	14	0	111
70 - 79	48	10	0	58
80 - 89	10	5	0	15
90 -	1	0	0	1
Unknown	0	0	0	0
Total	247	43	0	290



## Carcinoma of the Oropharynx ----- 290 Cases

## Histological Distribution by Subsite

Histologic type	Soft palate	Lateral wall	Posterior wall	Base of tongue	Orophar- ynx, NOS	Total
Neoplasm, malign.	0	1	0	0	0	1
Carcinoma, NOS	0	0	0	1	1	2
Ca., undiff., NOS	0	4	0	1	0	5
S.C.C. in situ, NOS	0	2	0	0	1	3
S.C.C., NOS	22	146	14	50	6	238
S.C.C., kerat., NOS	2	10	1	8	0	21
S.C.C., large cell, nonkerat.	0	3	0	0	0	3
S.C.C., small cell, nonkerat.	0	2	0	2	0	4
S.C.C., spindle cell	1	0	0	0	0	1
Adenocarcinoma, NOS	0	1	0	0	0	1
Adenoid cystic ca.	0	1	0	1	0	2
Mucoepidermoid ca.	1	0	0	0	0	1
Malign. melanoma, NOS	0	1	0	1	0	2
Mixed tumor, malign., NOS	0	1	0	0	0	1
Malign. lymphoma, NOS	0	2	0	0	1	3
Plasmacytoma, NOS	0	2	0	0	0	2
Total	26	176	15	64	9	290

NOS: not otherwise specified.

Malign., malign.: malignant.

Ca., ca.: carcinoma.

undiff.: undifferentiated.

S.C.C.: squamous cell carcinoma.

kerat.: keratinizing.

nonkerat.: nonkeratinizing.

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	15	3	0	4	6	1	0	0	0	29
T2	53 *	13	0	11	17	18 *	5	0	0	117
T3	23 *	9	0	7 *	19	8	5	0	0	71
T4	4	10	0	2	26 *	18 ***	3 *	0	0	63
TX	2	0	0	0	1	0	0	2 *	0	5
T-	1	0	0	0	0	0	0	0	4	5
Total	98	35	0	24	69	45	13	2	4	290

M1: 10 cases. Each \* signifies one M1 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Oropharynx ----- 290 Cases

## Treatment Method for the Primary Lesion by Subsite

Treatment method	Soft palate	Lateral wall	Posterior wall	Base of tongue	Oropharynx, NOS	Total
Surgery						
0) Without	13	113	10	40	6	182
1) With	13	63	5	24	3	108
9) Unknown	0	0	0	0	0	0
Radiotherapy						
0) Without	10	40	1	11	2	64
1) With	16	136	14	53	7	226
9) Unknown	0	0	0	0	0	0
Chemotherapy						
0) Without	18	85	8	35	3	149
1) With	8	91	7	29	6	141
9) Unknown	0	0	0	0	0	0
Total	26	176	15	64	9	290

NOS: not otherwise specified.

## Treatment Method for the Cervical Lymph Nodes by Subsite

Treatment method	Soft palate	Lateral wall	Posterior wall	Base of tongue	Oropharynx, NOS	Total
Surgery						
0) Without	21	110	9	32	5	177
1) With	5	66	6	32	4	113
9) Unknown	0	0	0	0	0	0
Radiotherapy						
0) Without	17	70	4	15	4	110
1) With	7	102	9	47	5	170
9) Unknown	2	4	2	2	0	10
Chemotherapy						
0) Without	22	96	10	38	3	169
1) With	4	80	5	26	6	121
9) Unknown	0	0	0	0	0	0
Total	26	176	15	64	9	290

NOS: not otherwise specified.

## Carcinoma of the Oropharynx ----- 290 Cases

## Sequence of Treatment Methods for the Primary Lesion by Subsite

Sequence of treatment methods	Soft palate	Lateral wall	Posterior wall	Base of tongue	Oropharynx, NOS	Total
No treatment	2	9	0	2	0	13
B) Rad. alone	6	35	5	17	2	65
F) (Rad. +Chem.)	3	37	5	11	3	59
A) Surg. alone	7	23	1	7	0	38
CB) Chem. ->Rad.	1	16	0	5	0	22
AB) Surg. ->Rad.	3	9	2	6	0	20
FA) (Rad. +Chem.) ->Surg.	2	10	1	3	1	17
BA) Rad. ->Surg.	0	9	0	3	1	13
C) Chem. alone	0	6	0	2	1	9
CAB) Chem. ->Surg. ->Rad.	0	4	1	0	0	5
CF) Chem. ->(Rad. +Chem.)	0	4	0	1	0	5
FC) (Rad. +Chem.) ->Chem.	0	4	0	1	0	5
AC) Surg. ->Chem.	1	1	0	0	1	3
AF) Surg. ->(Rad. +Chem.)	0	2	0	1	0	3
ABC) Surg. ->Rad. ->Chem.	0	1	0	1	0	2
BC) Rad. ->Chem.	0	1	0	1	0	2
FAC) (Rad. +Chem.) ->Surg. ->Chem.	0	1	0	1	0	2
Others	1	4	0	2	0	7
Unknown	0	0	0	0	0	0
Total	26	176	15	64	9	290

NOS: not otherwise specified.

Rad.: radiotherapy.

Chem.: chemotherapy.

Surg.: surgery.

Treatment methods in parentheses were given concurrently.

## Carcinoma of the Oropharynx ----- 290 Cases

## Surgical Method for the Primary Lesion by Subsite

Surgical method		Soft palate	Lateral wall	Posterior wall	Base of tongue	Oropharynx, NOS	Total
H0)	No surgery	13	113	10	40	6	182
B3)	Unilateral resection of the lateral wall of the oropharynx	0	18	0	1	0	19
B6)	Partial resection of the soft palate	8	2	0	0	0	10
B3F1)	Unilateral resection of the lateral wall of the oropharynx with mandibulotomy	0	5	0	0	0	5
B9)	Resection of the oropharynx, other type	0	5	0	0	0	5
B1)	Partial resection of the base of tongue	0	0	0	3	0	3
B2C4)	Total resection of the base of tongue with total laryngectomy	0	0	0	3	0	3
B3B1)	Unilateral resection of the lateral wall of the oropharynx with partial resection of the base of tongue	0	3	0	0	0	3
H9)+	Others	5	30	5	17	3	60
	Unknown	0	0	0	0	0	0
Total		26	176	15	64	9	290

NOS: not otherwise specified.

## Carcinoma of the Oropharynx ----- 290 Cases

## Neck Dissection on the Ipsilateral Side by Subsite

Neck dissection	Soft palate	Lateral wall	Posterior wall	Base of tongue	Oropharynx, NOS	Total
0) No N.D.	21	110	9	32	5	177
1) Radical N.D.	1	27	1	15	1	45
2) Conservative N.D.	2	37	4	15	2	60
3) Upper N.D.	0	0	0	0	0	0
4) Partial N.D.	1	1	0	2	1	5
5) Enucleation	1	0	0	0	0	1
8) Others	0	1	0	0	0	1
9) Unknown	0	0	1	0	0	1
Total	26	176	15	64	9	290

NOS: not otherwise specified.

N.D.: neck dissection.

## Neck Dissection on the Contralateral Side by Subsite

Neck dissection	Soft palate	Lateral wall	Posterior wall	Base of tongue	Oropharynx, NOS	Total
0) No N.D.	22	164	11	47	6	250
1) Radical N.D.	0	1	0	1	0	2
2) Conservative N.D.	2	8	2	13	1	26
3) Upper N.D.	1	1	0	3	0	5
4) Partial N.D.	1	1	0	0	2	4
5) Enucleation	0	0	0	0	0	0
8) Others	0	1	1	0	0	2
9) Unknown	0	0	1	0	0	1
Total	26	176	15	64	9	290

NOS: not otherwise specified.

N.D.: neck dissection.

## Carcinoma of the Oropharynx ----- 290 Cases

## Reconstructive Surgery by Subsite

Reconstructive surgery	Soft palate	Lateral wall	Posterior wall	Base of tongue	Oropharynx, NOS	Total
0) No reconstruction	22	137	11	42	6	218
D) Free RA MC flap	1	21	0	12	1	35
C) Free FA flap	1	9	2	5	0	17
5) PM MC flap	0	4	1	1	0	6
B) Free jejunal flap	0	1	1	1	1	4
E) Free anterolateral thigh flap	0	3	0	1	0	4
1) Skin graft	1	0	0	0	1	2
8)+ Others	1	1	0	2	0	4
9) Unknown	0	0	0	0	0	0
Total	26	176	15	64	9	290

NOS: not otherwise specified.

RA: rectus abdominis.

MC: musculocutaneous.

FA: forearm.

PM: pectoralis major.

## Carcinoma of the Oropharynx ----- 290 Cases

## Radiotherapy by Subsite

Type of radiotherapy	Soft palate	Lateral wall	Posterior wall	Base of tongue	Oropharynx, NOS	Total
0) No radiotherapy	10	39	1	11	2	63
1) X-ray	15	132	12	47	7	213
3) Electron beam	0	3	1	4	0	8
13) X-ray + electron beam	1	0	1	0	0	2
16) X-ray + HDR B.T. with <sup>192</sup> Ir	0	0	0	1	0	1
2) <sup>60</sup> Co $\gamma$ -ray	0	0	0	1	0	1
6) HDR B.T. with <sup>192</sup> Ir	0	1	0	0	0	1
8) Others	0	0	0	0	0	0
9) Unknown	0	1	0	0	0	1
Total	26	176	15	64	9	290

NOS: not otherwise specified.

HDR: high dose rate.

B. T. : brachytherapy.

## Chemotherapy by Subsite

Route of Administration	Soft palate	Lateral wall	Posterior wall	Base of tongue	Oropharynx, NOS	Total
0) No chemotherapy	18	85	8	35	3	149
1) Intravenous	6	79	7	22	5	119
2) Intraarterial	1	6	0	5	1	13
3) Oral	1	6	0	2	0	9
8) Others	0	0	0	0	0	0
9) Unknown	0	0	0	0	0	0
Total	26	176	15	64	9	290

NOS: not otherwise specified.

## Nasopharynx (2002)

88 Cases



## Carcinoma of the Nasopharynx ----- 88 Cases

## Subsite

Subsite	Number of patients
Postero-superior wall	39 ( 44.3%)
Lateral wall	26 ( 29.5%)
Inferior wall	5 ( 5.7%)
Nasopharynx, NOS	18 ( 20.5%)
Total	88 (100.0%)

NOS: not otherwise specified.

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	1	0	0	1
20 - 29	2	0	0	2
30 - 39	3	2	0	5
40 - 49	16	4	0	20
50 - 59	23	6	0	29
60 - 69	12	4	0	16
70 - 79	10	2	0	12
80 - 89	1	2	0	3
90 -	0	0	0	0
Unknown	0	0	0	0
Total	68	20	0	88

## Carcinoma of the Nasopharynx ----- 88 Cases

## Histological Distribution by Subsite

Histologic type	Postero- superior wall	Lateral wall	Inferior wall	Nasopharynx, NOS	Total
Carcinoma, NOS	5	0	0	1	6
Ca., undiff., NOS	7	6	0	2	15
Papillary S.C.C.	2	0	0	0	2
S.C.C. in situ, NOS	0	0	1	0	1
S.C.C., NOS	24	16	1	13	54
S.C.C., small cell, nonkerat.	1	0	0	0	1
Adenocarcinoma, NOS	0	0	3	0	3
Adenoid cystic ca.	0	2	0	0	2
Mucoepidermoid ca.	0	1	0	0	1
Malig. melanoma, NOS	0	0	0	1	1
Mixed tumor, malig., NOS	0	1	0	0	1
Malig. lymphoma, NOS	0	0	0	1	1
Total	39	26	5	18	88

NOS: not otherwise specified.

undiff.: undifferentiated.

nonkerat.: nonkeratinizing.

Ca., ca.: carcinoma.

S.C.C.: squamous cell carcinoma.

Malig., malig.: malignant.

## T and N Status

	N0	N1	N2	N3	NX	N-	Total
T0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0
T1	5	11 *	6	0	0	0	22
T2	2	0	3	0	0	0	5
T2a	3	1	1	2	0	0	7
T2b	6	2	3	1	0	0	12
T3	2	6 *	2	1	0	0	11
T4	10	5 *	8 **	0	0	0	23
TX	5	1	0	0	1	0	7
T-	0	0	0	0	0	1	1
Total	33	26	23	4	1	1	88

M1: 5 cases. Each \* signifies one M1 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Nasopharynx ----- 88 Cases

## Treatment Method for the Primary Lesion by Subsite

Treatment method	Postero- superior wall	Lateral wall	Inferior wall	Nasopharynx, NOS	Total
Surgery					
0) Without	38	24	1	16	79
1) With	1	2	4	2	9
9) Unknown	0	0	0	0	0
Radiotherapy					
0) Without	2	2	2	2	8
1) With	37	24	3	15	79
9) Unknown	0	0	0	1	1
Chemotherapy					
0) Without	8	5	4	6	23
1) With	31	21	1	11	64
9) Unknown	0	0	0	1	1
Total	39	26	5	18	88

NOS: not otherwise specified.

## Treatment Method for the Cervical Lymph Nodes by Subsite

Treatment method	Postero- superior wall	Lateral wall	Inferior wall	Nasopharynx, NOS	Total
Surgery					
0) Without	33	25	4	16	78
1) With	6	1	1	2	10
9) Unknown	0	0	0	0	0
Radiotherapy					
0) Without	6	5	4	3	18
1) With	32	21	1	15	69
9) Unknown	1	0	0	0	1
Chemotherapy					
0) Without	12	8	5	6	31
1) With	27	18	0	12	57
9) Unknown	0	0	0	0	0
Total	39	26	5	18	88

NOS: not otherwise specified.

## Carcinoma of the Nasopharynx ----- 88 Cases

## Sequence of Treatment Methods for the Primary Lesion by Subsite

Sequence of treatment methods	Postero- superior wall	Lateral wall	Inferior wall	Nasopharynx, NOS	Total
No treatment	2	0	0	1	3
F) (Rad. +Chem. )	12	13	0	6	31
B) Rad. alone	5	3	1	4	13
CB) Chem. ->Rad.	7	4	0	1	12
BC) Rad. ->Chem.	6	0	0	2	8
A) Surg. alone	0	2	2	0	4
FC) (Rad. +Chem. )->Chem.	2	2	0	0	4
BA) Rad. ->Surg.	1	0	0	1	2
CBC) Chem. ->Rad. ->Chem.	1	1	0	0	2
Others	3	1	2	3	9
Unknown	0	0	0	0	0
Total	39	26	5	18	88

NOS: not otherwise specified.

Rad. : radiotherapy.

Chem. : chemotherapy.

Surg. : surgery.

Treatment methods in parentheses were given concurrently.

## Carcinoma of the Nasopharynx ----- 88 Cases

## Surgical Method for the Primary Lesion by Subsite

Surgical method		Postero- superior wall	Lateral wall	Inferior wall	Nasopharynx, NOS	Total
H0)	No surgery	38	24	1	16	79
B6)	Partial resection of the soft palate	0	0	1	0	1
E1H9)	Partial maxillectomy with others	0	1	0	0	1
H9)	Others	1	1	3	2	7
	Unknown	0	0	0	0	0
Total		39	26	5	18	88

NOS: not otherwise specified.

## Carcinoma of the Nasopharynx ----- 88 Cases

## Neck Dissection on the Ipsilateral Side by Subsite

Neck dissection	Postero- superior wall	Lateral wall	Inferior wall	Nasopharynx, NOS	Total
0) No N. D.	33	25	4	16	78
1) Radical N. D.	1	0	0	0	1
2) Conservative N. D.	4	0	1	1	6
3) Upper N. D.	0	0	0	0	0
4) Partial N. D.	1	0	0	0	1
5) Enucleation	0	1	0	1	2
8) Others	0	0	0	0	0
9) Unknown	0	0	0	0	0
Total	39	26	5	18	88

NOS: not otherwise specified.

N. D. : neck dissection.

## Neck Dissection on the Contralateral Side by Subsite

Neck dissection	Postero- superior wall	Lateral wall	Inferior wall	Nasopharynx, NOS	Total
0) No N. D.	38	26	5	18	87
1) Radical N. D.	0	0	0	0	0
2) Conservative N. D.	1	0	0	0	1
3) Upper N. D.	0	0	0	0	0
4) Partial N. D.	0	0	0	0	0
5) Enucleation	0	0	0	0	0
8) Others	0	0	0	0	0
9) Unknown	0	0	0	0	0
Total	39	26	5	18	88

NOS: not otherwise specified.

N. D. : neck dissection.

Carcinoma of the Nasopharynx ----- 88 Cases

### Reconstructive Surgery by Subsite

Reconstructive surgery	Postero- superior wall	Lateral wall	Inferior wall	Nasopharynx, NOS	Total
0) No reconstruction	39	25	5	17	86
3) Mucosal flap	0	1	0	0	1
C) Free FA flap	0	0	0	1	1
8) Others	0	0	0	0	0
9) Unknown	0	0	0	0	0
Total	39	26	5	18	88

NOS: not otherwise specified.

FA: forearm.

## Carcinoma of the Nasopharynx ----- 88 Cases

## Radiotherapy by Subsite

Type of radiotherapy	Postero- superior wall	Lateral wall	Inferior wall	Nasopharynx, NOS	Total
0) No radiotherapy	2	2	2	2	8
1) X-ray	33	21	2	14	70
13) X-ray + electron beam	2	2	0	0	4
3) Electron beam	1	1	1	1	4
21) <sup>60</sup> Co $\gamma$ -ray + X-ray	1	0	0	0	1
8) Others	0	0	0	0	0
9) Unknown	0	0	0	1	1
Total	39	26	5	18	88

NOS: not otherwise specified.

## Chemotherapy by Subsite

Route of Administration	Postero- superior wall	Lateral wall	Inferior wall	Nasopharynx, NOS	Total
0) No chemotherapy	8	5	4	6	23
1) Intravenous	29	20	1	11	61
2) Intraarterial	0	1	0	0	1
3) Oral	1	0	0	1	2
8) Others	0	0	0	0	0
9) Unknown	1	0	0	0	1
Total	39	26	5	18	88

NOS: not otherwise specified.



Nasal Cavity and Paranasal Sinuses  
(Excluding the Maxillary Sinus)  
(2002)

56 Cases

## Carcinoma of the Nasal Cavity and Paranasal Sinuses ----- 56 Cases

## Subsite

Subsite	Number of patients
Nasal cavity	29 ( 51.8%)
Ethmoid sinus	22 ( 39.3%)
Frontal sinus	2 ( 3.6%)
Sphenoid sinus	2 ( 3.6%)
Paranasal sinus, NOS	1 ( 1.8%)
Total	56 (100.0%)

NOS: not otherwise specified.

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	2	0	0	2
30 - 39	1	3	0	4
40 - 49	7	1	0	8
50 - 59	4	3	0	7
60 - 69	13	4	0	17
70 - 79	11	4	0	15
80 - 89	1	2	0	3
90 -	0	0	0	0
Unknown	0	0	0	0
Total	39	17	0	56

## Carcinoma of the Nasal Cavity and Paranasal Sinuses ----- 56 Cases

## Histological Distribution by Subsite

Histologic type	Nasal cavity (C30.0)	Ethmoid sinus (C31.1)	Frontal sinus (C31.2)	Sphenoid sinus (C31.3)	Paranasal sinus, NOS (C31.9)	Total
Neoplasm, malig.	2	0	0	0	0	2
Carcinoma, NOS	1	1	0	0	0	2
Ca., undiff., NOS	1	1	0	0	0	2
S.C.C. in situ, NOS	1	0	0	0	0	1
S.C.C., NOS	10	14	1	1	0	26
S.C.C., small cell, nonkerat.	0	2	0	0	0	2
S.C.C., spindle cell	0	1	0	0	0	1
Transitional cell ca., NOS	0	0	1	0	0	1
Adenocarcinoma, NOS	1	0	0	0	0	1
Adenoid cystic ca.	0	0	0	0	1	1
Malig. melanoma, NOS	6	1	0	0	0	7
Rhabdomyosarcoma, NOS	1	1	0	0	0	2
Chondrosarcoma, NOS	1	0	0	0	0	1
Esthesioneuroblastoma	4	1	0	1	0	6
Malig. lymphoma, NOS	1	0	0	0	0	1
Total	29	22	2	2	1	56

NOS: not otherwise specified.

Ca., ca.: carcinoma.

S.C.C.: squamous cell carcinoma.

Malig., malig.: malignant.

undiff.: undifferentiated.

nonkerat.: nonkeratinizing.

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	0	0	0	0	0	0	0	0	0	0
T2	2	0	0	0	0	0	0	0	0	2
T3	1	0	0	0	0	0	0	0	0	1
T4	16	0	0	1	1	0	0	1	0	19
TX	0	0	0	0	0	0	0	0	0	0
T-	31 *	0	1	0	0	1 *	0	0	1	34
Total	50	0	1	1	1	1	0	1	1	56

M1: 2 cases. Each \* signifies one M1 case.

T-: T classification not defined.

N-: N classification not defined.

## Carcinoma of the Nasal Cavity and Paranasal Sinuses ----- 56 Cases

## Treatment Method for the Primary Lesion by Subsite

Treatment method	Nasal cavity (C30.0)	Ethmoid sinus (C31.1)	Frontal sinus (C31.2)	Sphenoid sinus (C31.3)	Paranasal sinus, NOS (C31.9)	Total
Surgery						
0) Without	12	12	1	1	0	26
1) With	17	10	1	1	1	30
9) Unknown	0	0	0	0	0	0
Radiotherapy						
0) Without	15	3	0	1	1	20
1) With	14	19	2	1	0	36
9) Unknown	0	0	0	0	0	0
Chemotherapy						
0) Without	15	11	1	0	1	28
1) With	14	11	1	2	0	28
9) Unknown	0	0	0	0	0	0
Total	29	22	2	2	1	56

NOS: not otherwise specified.

## Treatment Method for the Cervical Lymph Nodes by Subsite

Treatment method	Nasal cavity (C30.0)	Ethmoid sinus (C31.1)	Frontal sinus (C31.2)	Sphenoid sinus (C31.3)	Paranasal sinus, NOS (C31.9)	Total
Surgery						
0) Without	26	19	2	2	1	50
1) With	3	3	0	0	0	6
9) Unknown	0	0	0	0	0	0
Radiotherapy						
0) Without	28	21	1	2	1	53
1) With	1	1	0	0	0	2
9) Unknown	0	0	1	0	0	1
Chemotherapy						
0) Without	23	20	2	2	1	48
1) With	6	2	0	0	0	8
9) Unknown	0	0	0	0	0	0
Total	29	22	2	2	1	56

NOS: not otherwise specified.

## Carcinoma of the Nasal Cavity and Paranasal Sinuses ----- 56 Cases

## Sequence of Treatment Methods for the Primary Lesion by Subsite

Sequence of treatment methods	Nasal cavity (C30.0)	Ethmoid sinus (C31.1)	Frontal sinus (C31.2)	Sphenoid sinus (C31.3)	Paranasal sinus, NOS (C31.9)	Total
No treatment	4	0	0	0	0	4
B) Rad. alone	3	6	1	0	0	10
A) Surg. alone	5	2	0	0	1	8
F) (Rad. +Chem.)	1	4	0	0	0	5
BA) Rad. ->Surg.	2	2	0	0	0	4
CB) Chem. ->Rad.	2	2	0	0	0	4
FA) (Rad. +Chem.)->Surg.	2	1	1	0	0	4
CAC) Chem. ->Surg. ->Chem.	3	0	0	0	0	3
AB) Surg. ->Rad.	1	1	0	0	0	2
AC) Surg. ->Chem.	2	0	0	0	0	2
AF) Surg. ->(Rad. +Chem.)	1	1	0	0	0	2
C) Chem. alone	1	0	0	1	0	2
Others	2	3	0	1	0	6
Unknown	0	0	0	0	0	0
Total	29	22	2	2	1	56

NOS: not otherwise specified.

Rad.: radiotherapy.

Surg.: surgery.

Chem.: chemotherapy.

Treatment methods in parentheses were given concurrently.

## Carcinoma of the Nasal Cavity and Paranasal Sinuses ----- 56 Cases

## Surgical Method for the Primary Lesion by Subsite

Surgical method		Nasal cavity (C30. 0)	Ethmoid sinus (C31. 1)	Frontal sinus (C31. 2)	Sphenoid sinus (C31. 3)	Paranasal sinus, NOS (C31. 9)	Total
H0)	No surgery	12	12	1	1	0	26
H5)	Skull base surgery	2	6	0	0	0	8
E1)	Partial maxillectomy	7	0	0	0	0	7
E3)	Total maxillectomy	1	1	0	0	0	2
E1H5)	Partial maxillectomy with skull base surgery	0	1	0	0	0	1
E2)	Subtotal maxillectomy	1	0	0	0	0	1
E4H5)	Extended total maxillectomy with skull base surgery	0	0	1	0	0	1
E9)	Maxillectomy, other type	1	0	0	0	0	1
H5E1)	Skull base surgery with partial maxillectomy	0	0	0	0	1	1
H5E2)	Skull base surgery with subtotal maxillectomy	0	1	0	0	0	1
H5E4)	Skull base surgery with extended total maxillectomy	0	1	0	0	0	1
H9)	Others	5	0	0	1	0	6
	Unknown	0	0	0	0	0	0
Total		29	22	2	2	1	56

NOS: not otherwise specified.

## Carcinoma of the Nasal Cavity and Paranasal Sinuses ----- 56 Cases

## Neck Dissection on the Ipsilateral Side by Subsite

Neck dissection	Nasal cavity (C30.0)	Ethmoid sinus (C31.1)	Frontal sinus (C31.2)	Sphenoid sinus (C31.3)	Paranasal sinus, NOS (C31.9)	Total
0) No N.D.	26	19	2	2	1	50
1) Radical N.D.	0	1	0	0	0	1
2) Conservative N.D.	2	0	0	0	0	2
3) Upper N.D.	1	1	0	0	0	2
4) Partial N.D.	0	1	0	0	0	1
5) Enucleation	0	0	0	0	0	0
8) Others	0	0	0	0	0	0
9) Unknown	0	0	0	0	0	0
Total	29	22	2	2	1	56

NOS: not otherwise specified.

N.D. : neck dissection.

## Neck Dissection on the Contralateral Side by Subsite

Neck dissection	Nasal cavity (C30.0)	Ethmoid sinus (C31.1)	Frontal sinus (C31.2)	Sphenoid sinus (C31.3)	Paranasal sinus, NOS (C31.9)	Total
0) No N.D.	29	22	2	2	1	56
1) Radical N.D.	0	0	0	0	0	0
2) Conservative N.D.	0	0	0	0	0	0
3) Upper N.D.	0	0	0	0	0	0
4) Partial N.D.	0	0	0	0	0	0
5) Enucleation	0	0	0	0	0	0
8) Others	0	0	0	0	0	0
9) Unknown	0	0	0	0	0	0
Total	29	22	2	2	1	56

NOS: not otherwise specified.

N.D. : neck dissection.

## Carcinoma of the Nasal Cavity and Paranasal Sinuses ----- 56 Cases

## Reconstructive Surgery by Subsite

Reconstructive surgery	Nasal cavity (C30.0)	Ethmoid sinus (C31.1)	Frontal sinus (C31.2)	Sphenoid sinus (C31.3)	Paranasal sinus, NOS (C31.9)	Total
0) No reconstruction	24	15	1	2	0	42
D) Free RA MC flap	0	3	1	0	1	5
C) Free FA flap	2	1	0	0	0	3
1) Skin graft	1	0	0	0	0	1
2) Local skin flap	0	1	0	0	0	1
C8) Free FA flap + others	1	0	0	0	0	1
8) Others	0	2	0	0	0	2
9) Unknown	1	0	0	0	0	1
Total	29	22	2	2	1	56

NOS: not otherwise specified.

RA: rectus abdominis.

MC: musculocutaneous.

FA: forearm.



## Carcinoma of the Nasal Cavity and Paranasal Sinuses ----- 56 Cases

## Radiotherapy by Subsite

Type of radiotherapy	Nasal cavity (C30.0)	Ethmoid sinus (C31.1)	Frontal sinus (C31.2)	Sphenoid sinus (C31.3)	Paranasal sinus, NOS (C31.9)	Total
0) No radiotherapy	15	3	0	1	1	20
1) X-ray	13	16	2	1	0	32
13) X-ray + electron beam	0	1	0	0	0	1
4) Proton beam	0	1	0	0	0	1
42) Proton beam + <sup>60</sup> Co $\gamma$ -ray	1	0	0	0	0	1
8) Others	0	0	0	0	0	0
9) Unknown	0	1	0	0	0	1
Total	29	22	2	2	1	56

NOS: not otherwise specified.

## Chemotherapy by Subsite

Route of Administration	Nasal cavity (C30.0)	Ethmoid sinus (C31.1)	Frontal sinus (C31.2)	Sphenoid sinus (C31.3)	Paranasal sinus, NOS (C31.9)	Total
0) No chemotherapy	15	11	1	0	1	28
1) Intravenous	8	7	1	2	0	18
2) Intraarterial	3	4	0	0	0	7
3) Oral	2	0	0	0	0	2
8) Others	0	0	0	0	0	0
9) Unknown	1	0	0	0	0	1
Total	29	22	2	2	1	56

NOS: not otherwise specified.

## Maxillary Sinus (2002)

139 Cases

## Carcinoma of the Maxillary Sinus ----- 139 Cases

## Age Distribution by Gender

Age	Male	Female	Unknown	Total
0 - 9	0	0	0	0
10 - 19	0	0	0	0
20 - 29	0	1	0	1
30 - 39	2	1	0	3
40 - 49	9	3	0	12
50 - 59	31	8	0	39
60 - 69	31	8	0	39
70 - 79	24	12	0	36
80 - 89	5	4	0	9
90 -	0	0	0	0
Unknown	0	0	0	0
Total	102	37	0	139

## Histological Distribution

Histologic type	Number of patients
Neoplasm, malign.	2 ( 1.4%)
Carcinoma, NOS	3 ( 2.2%)
Ca., undiff., NOS	3 ( 2.2%)
Papillary S.C.C.	2 ( 1.4%)
S.C.C., NOS	97 ( 69.8%)
S.C.C., kerat., NOS	7 ( 5.0%)
S.C.C., large cell, nonkerat.	1 ( 0.7%)
S.C.C., small cell, nonkerat.	1 ( 0.7%)
S.C.C., spindle cell	1 ( 0.7%)
Adenocarcinoma, NOS	1 ( 0.7%)
Adenoid cystic ca.	12 ( 8.6%)
Mucoepidermoid ca.	1 ( 0.7%)
Malign. melanoma, NOS	6 ( 4.3%)
Carcinosarcoma, NOS	1 ( 0.7%)
Chondrosarcoma, NOS	1 ( 0.7%)
Total	139 (100.0%)

Malign., malign.: malignant.

Ca., ca.: carcinoma.

S.C.C.: squamous cell carcinoma.

nonkerat.: nonkeratinizing.

NOS: not otherwise specified.

undiff.: undifferentiated.

kerat.: keratinizing.

## Carcinoma of the Maxillary Sinus ----- 139 Cases

## T and N Status

	N0	N1	N2	N2a	N2b	N2c	N3	NX	N-	Total
T0	0	0	0	0	0	0	0	0	0	0
Tis	0	0	0	0	0	0	0	0	0	0
T1	1	0	0	0	0	0	0	0	0	1
T2	13	1	0	0	1	1	0	0	0	16
T3	41 *	8	0	1	5	2	0	0	0	57
T4	50 *	5	0	1	2	4 *	0	1	0	63
TX	2 *	0	0	0	0	0	0	0	0	2
T-	0	0	0	0	0	0	0	0	0	0
Total	107	14	0	2	8	7	0	1	0	139

M1: 4 cases. Each \* signifies one M1 case.

T-: T classification not defined.

N-: N classification not defined.

## Treatment Method for the Primary Lesion

Treatment method		Number of patients
Surgery	0) Without	42 ( 30.2%)
	1) With	97 ( 69.8%)
	9) Unknown	0 ( 0.0%)
Radiotherapy	0) Without	21 ( 15.1%)
	1) With	118 ( 84.9%)
	9) Unknown	0 ( 0.0%)
Chemotherapy	0) Without	42 ( 30.2%)
	1) With	97 ( 69.8%)
	9) Unknown	0 ( 0.0%)
Total		139 (100.0%)

## Treatment Method for the Cervical Lymph Nodes

Treatment method		Number of patients
Surgery	0) Without	107 ( 77.0%)
	1) With	29 ( 20.9%)
	9) Unknown	3 ( 2.2%)
Radiotherapy	0) Without	113 ( 81.3%)
	1) With	23 ( 16.5%)
	9) Unknown	3 ( 2.2%)
Chemotherapy	0) Without	112 ( 80.6%)
	1) With	26 ( 18.7%)
	9) Unknown	1 ( 0.7%)
Total		139 (100.0%)

## Carcinoma of the Maxillary Sinus ----- 139 Cases

## Sequence of Treatment Methods for the Primary Lesion

Sequence of treatment methods	Number of patients
No treatment	8 ( 5.8%)
FA) (Rad. +Chem.) -> Surg.	26 ( 18.7%)
F) (Rad. +Chem.)	14 ( 10.1%)
AB) Surg. -> Rad.	11 ( 7.9%)
A) Surg. alone	9 ( 6.5%)
FAB) (Rad. +Chem.) -> Surg. -> Rad.	9 ( 6.5%)
BA) Rad. -> Surg.	8 ( 5.8%)
B) Rad. alone	5 ( 3.6%)
FC) (Rad. +Chem.)->Chem.	5 ( 3.6%)
G) (Surg. +Rad. +Chem.)	5 ( 3.6%)
CAB) Chem. -> Surg. -> Rad.	4 ( 2.9%)
ABC) Surg. ->Rad. ->Chem.	3 ( 2.2%)
AF) Surg. -> (Rad. +Chem.)	3 ( 2.2%)
C) Chem. alone	3 ( 2.2%)
CB) Chem. ->Rad.	3 ( 2.2%)
FAF) (Rad. +Chem.)->Surg. ->(Rad. +Chem.)	3 ( 2.2%)
Others	20 ( 14.4%)
Unknown	0 ( 0.0%)
Total	139 (100.0%)

Rad. : radiotherapy.

Chem. : chemotherapy.

Surg. : surgery.

Treatment methods in parentheses were given concurrently.

## Surgical Method for the Primary Lesion

Surgical method	Number of patients
H0) No surgery	42 ( 30.2%)
E3) Total maxillectomy	36 ( 25.9%)
E1) Partial maxillectomy	27 ( 19.4%)
E2) Subtotal maxillectomy	9 ( 6.5%)
E4) Extended total maxillectomy	7 ( 5.0%)
E9) Maxillectomy, other type	5 ( 3.6%)
E4H5) Extended total maxillectomy with skull base surgery	4 ( 2.9%)
H9)+ Others	9 ( 6.5%)
Unknown	0 ( 0.0%)
Total	139 (100.0%)

## Carcinoma of the Maxillary Sinus ----- 139 Cases

**Neck Dissection on the Ipsilateral Side**

Neck dissection	Number of patients	
0) No N. D.	107	( 77.0%)
1) Radical N. D.	7	( 5.0%)
2) Conservative N. D.	7	( 5.0%)
3) Upper N. D.	8	( 5.8%)
4) Partial N. D.	5	( 3.6%)
5) Enucleation	1	( 0.7%)
8) Others	0	( 0.0%)
9) Unknown	4	( 2.9%)
Total	139	(100.0%)

N. D. : neck dissection.

**Neck Dissection on the Contralateral Side**

Neck dissection	Number of patients	
0) No N. D.	131	( 94.2%)
1) Radical N. D.	1	( 0.7%)
2) Conservative N. D.	0	( 0.0%)
3) Upper N. D.	1	( 0.7%)
4) Partial N. D.	1	( 0.7%)
5) Enucleation	0	( 0.0%)
8) Others	0	( 0.0%)
9) Unknown	5	( 3.6%)
Total	139	(100.0%)

N. D. : neck dissection.

## Carcinoma of the Maxillary Sinus ----- 139 Cases

## Reconstructive Surgery

Reconstructive surgery	Number of patients
0) No reconstruction	87 ( 62.6%)
D) Free RA MC flap	25 ( 18.0%)
1) Skin graft	14 ( 10.1%)
D8) Free RA MC flap + others	4 ( 2.9%)
C) Free FA flap	2 ( 1.4%)
F) Free scapular OC flap	2 ( 1.4%)
8)+ Others	5 ( 3.6%)
9) Unknown	0 ( 0.0%)
Total	139 (100.0%)

RA: rectus abdominis.

MC: musculocutaneous.

FA: forearm.

OC: osteocutaneous.

## Radiotherapy

Type of radiotherapy	Number of patients
0) No radiotherapy	21 ( 15.1%)
1) X-ray	104 ( 74.8%)
3) Electron beam	7 ( 5.0%)
2) $^{60}\text{Co}$ $\gamma$ -ray	3 ( 2.2%)
21) $^{60}\text{Co}$ $\gamma$ -ray + X-ray	1 ( 0.7%)
5) Heavy ion beam	1 ( 0.7%)
8) Others	0 ( 0.0%)
9) Unknown	2 ( 1.4%)
Total	139 (100.0%)

## Carcinoma of the Maxillary Sinus ----- 139 Cases

## Total Radiation Dose for the Primary Lesion

Dose (Gy)	Number of patients
No radiotherapy	21 ( 15.1%)
0 <-< 10	0 ( 0.0%)
10 -< 20	0 ( 0.0%)
20 -< 30	2 ( 1.4%)
30 -< 40	9 ( 6.5%)
40 -< 50	24 ( 17.3%)
50 -< 60	24 ( 17.3%)
60 -< 70	40 ( 28.8%)
70 -< 80	15 ( 10.8%)
80 -< 90	2 ( 1.4%)
90 -	0 ( 0.0%)
Dose unknown	2 ( 1.4%)
No information	0 ( 0.0%)
Total	139 (100.0%)

0 <-< 40 Gy	9.3% of irradiated patients
0 <-< 50 Gy	29.7% of irradiated patients
0 <-< 60 Gy	50.0% of irradiated patients

## Chemotherapy

Route of Administration	Number of patients
0) No chemotherapy	42 ( 30.2%)
1) Intravenous	36 ( 25.9%)
2) Intraarterial	56 ( 40.3%)
3) Oral	4 ( 2.9%)
8) Others	0 ( 0.0%)
9) Unknown	1 ( 0.7%)
Total	139 (100.0%)