

: CT MR

1

2 .

CT MR

62

3가

가

1 ,

가

2 ,

3

, carcinoma ex pleomorphic adenoma, B - cell

1

가

, Kimura

2

. T - cell

3

: CT MR

가

CT MR

(buccal space)

(buccinator muscle)

가

1982 1

2002 8

CT

MR

(1, 2).

62

(1, 2).

(n=18)

(n=44)

(n=33)

(n=11)

, CT MR

33 (1 - 84)

가 24

, 가 38

CT

가 15 , MR

가 43 , CT MR

가 4

62

28 ,

18 ,

6 , 2 ,

3

2 , Kimura

2 ,

1 . 28

8 ,

2003 6 2

2003 10 20

19, 1, 5, T-cell, 3, B-cell, 1, 4, 2, (glomus tumor) 1, (ameloblastoma) 1, CT, 1, carcinoma ex pleomorphic adenoma가 2, MR, (adenoid cystic carcinoma) 1, (acinic cell carcinoma) 1, CT GE 9800 scanner (GE Medical Systems, Milwaukee, WI, U.S.A.) (n=4) GE HiSpeed Advantage (GE Medical Systems) (n=15), 17-21 cm, 3-5 mm, 3-5 mm, 60-80 ml (Ultravist 370; Schering, Berlin, Germany) 2 ml, MR 0.5 T Goldstar Supertec 5000 (Goldstar, Seoul, Korea) (n=5), 1.0 T Magnetom Impact (Siemens, Erlangen, Germany) (n=8), 1.5 T Signa Horizon Echospeed (GE Medical Systems) (n=14), 1.5T Magnetom Vision Plus (Siemens) (n=12), 2.0 T Spectro-20000 (Goldstar) (n=8), 18-25 cm, 180-256 * 256-400, 4-8 mm, 0-2 mm, 1-4, T1, (TR/TE=500-800/12-30 msec), T2, (TR/TE=2000-500/80-112 msec), Gadolinium-DTPA (Magnevist, Schering, Germany, 0.1 mmol/kg) 45, carcinoma ex

가

. CT

MR

가 1,
가 2,

(Fig. 1).

(Table 1). 1

3

1 가 1, carcinoma ex pleomorphic adenoma, B-cell 1

(Fig. 2), carcinoma ex

pleomorphic adenoma

가

, carcinoma ex

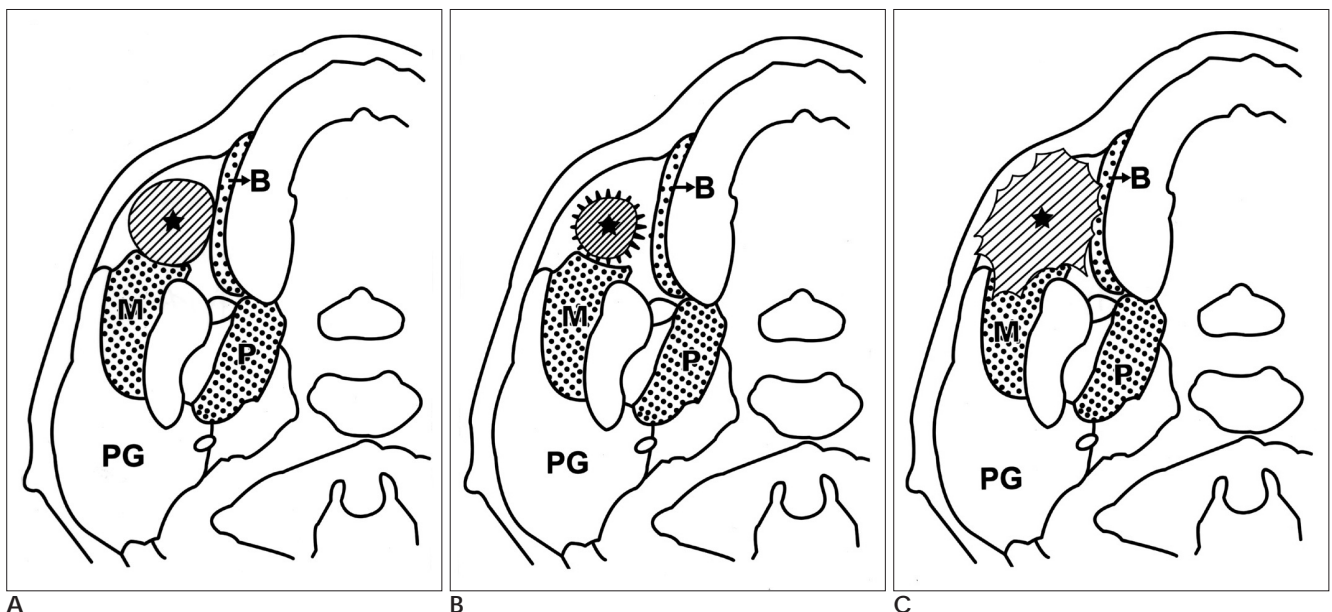


Fig. 1. Representative schema of the buccal space lesion.

A. Type 1 lesion (asterisk) represents mass with distinct margin, confined to the buccal space.

B. Type 2 lesion (asterisk) represents lesion with surrounding infiltration, confined to the buccal space.

C. Type 3 lesion (asterisk) represents multi-space occupying lesion. M=masticator muscle, P=pterygoid muscle, B=buccinator muscle, PG=parotid gland.

pleomorphic adenoma

가

3

T - cell

B -

T - cell

(Fig. 4).

cell

1

2

Kimura

가

가

T2 -

Kimura

가

(Fig. 3),

가

가,

Table 1. Buccal Space Lesions Classified by Their Margin and Presence or Absence of Invasion to Surrounding Structures

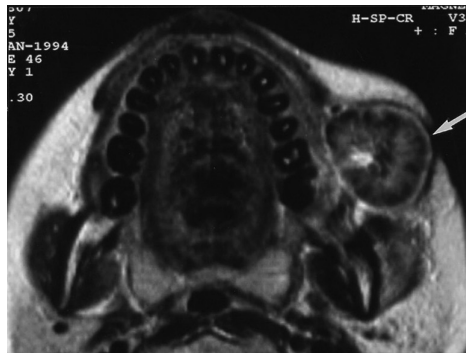
Type 1	No.	Type 2	No.	Type 3	No.
Carcinoma ex pleomorphic adenoma	2	Abscess	2	Venous malformation	15
Pleomorphic adenoma	1	Complicated dermoid cyst	1	Hemangioma	7
Acinic cell carcinoma	1	Kimura disease	2	Arteriovenous malformation	4
Glomus tumor	1	Adenoid cystic carcinoma	1	Lymphangioma	1
Rhabdomyosarcoma	2			Neurofibroma	4
Ameloblastoma	1			Foreign body granuloma	2
Lymphoma	1			Inflammation	6
Accessory gland or dilated duct	3			Lymphoma	3
Hemangioma	1			Metastasis	1

Type 1 represents mass with distinct margin, confined to the buccal space

Type 2 represents mass with surrounding infiltration, confined to the buccal space

Type 3 represents multi-space occupying mass

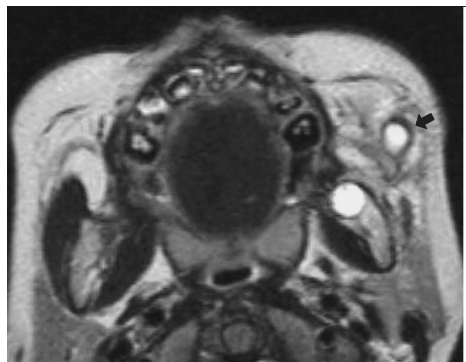
No. : number is patients



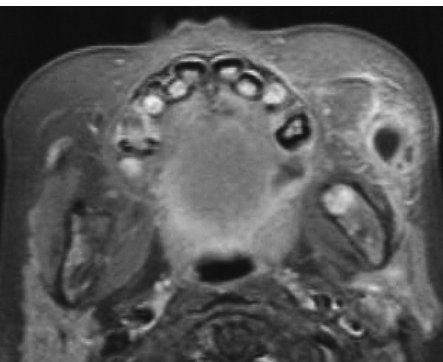
A



B

Fig. 2. A 19-year-old woman with acinic cell carcinoma in the left buccal space.**A.** T2-weighted axial MR image shows a well-defined mass lesion (arrow) with heterogeneous signal intensity.**B.** Postcontrast T1-weighted axial MR image shows heterogeneous enhancement of the mass.

A



B

Fig. 3. A 3-year-old girl with complicated dermoid cyst in the left buccal space.**A.** T2-weighted axial MR image shows central cystic portion with bright signal intensity, peripheral wall of low signal intensity (arrow), and surrounding ill-defined infiltration.**B.** Postcontrast T1-weighted axial MR image with fat suppression shows strong enhancement of the wall and surrounding infiltration of the lesion.

. T2 -

(Fig. 5). 4 MR

CT , MR

(pterygomandibular raphe) (1).

(medial and lateral pterygoid muscles)

가 , V

retroantral fat

(infratemporal fossa)

(1),

가 가 CT가 MR

MR

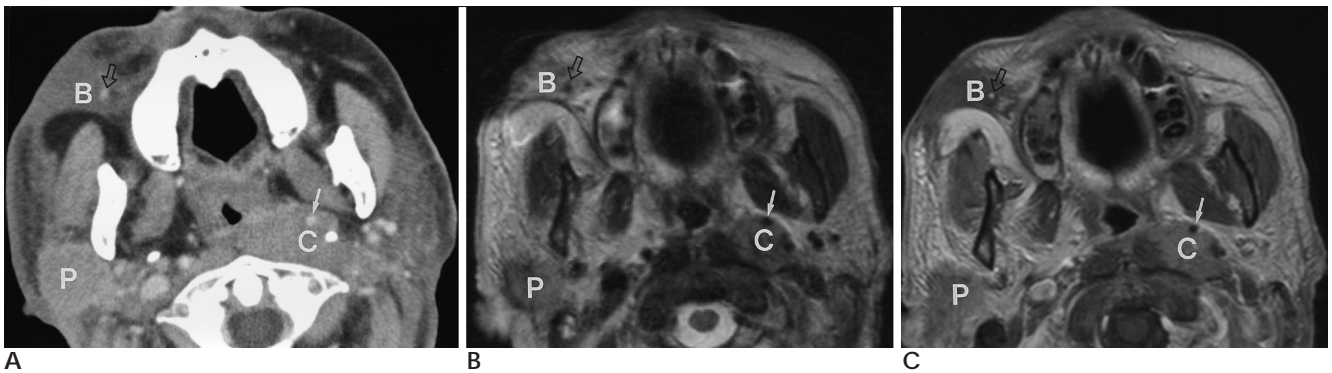


Fig. 4. A 53-year-old woman with peripheral T-cell lymphoma.

A. Axial CT scan shows soft tissue mass-like lesions involving the right buccal space (B), right parotid gland (P), and left carotid space (C). Diffuse infiltration in subcutaneous layer and skin thickening are also seen. Right facial vein (open arrow), left internal carotid artery (arrow).

B. T2-weighted axial MR image shows mild high signal intensity lesions in the right buccal space (B), right parotid gland (P), and left carotid space (C). Right facial vein (open arrow), left internal carotid artery (arrow).

C. Postcontrast T1-weighted axial MR image shows mild enhancement of the right buccal space lesion (B), and moderate enhancement of the right parotid gland (P) and left carotid space lesion (C). Right facial vein (open arrow), left internal carotid artery (arrow).

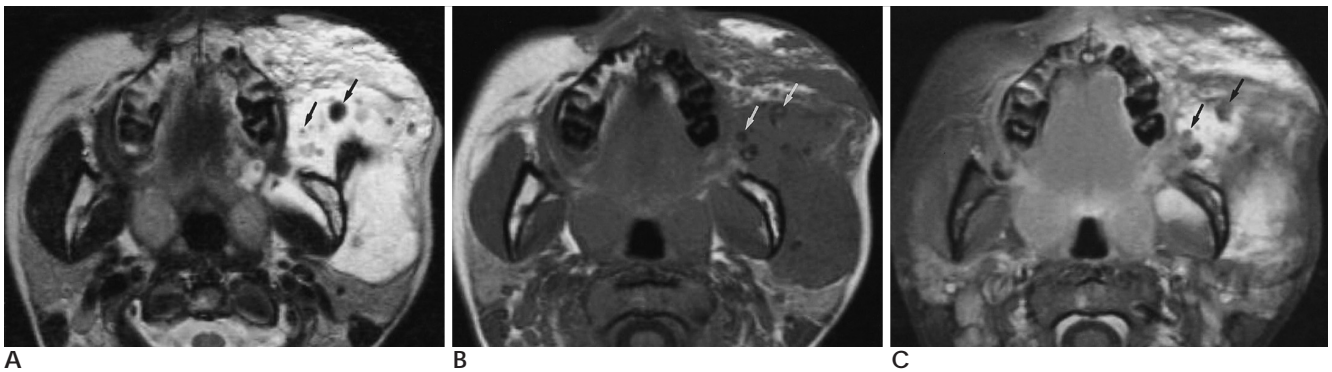


Fig. 5. A 22-year-old woman with venous malformation.

A. T2-weighted axial MR image shows a huge mass with bright signal intensity in the left buccal space and masticator space. Multiple phleboliths (arrows) of low signal intensity are noted.

B. T1-weighted axial MR image shows multiple phleboliths (arrows) of dark signal intensity with the mass lesion of low signal intensity.

C. Postcontrast T1-weighted axial MR image with fat suppression shows heterogeneous enhancement of the mass. Phleboliths (arrows).

CT 2 (1).
MR 가 CT MR
T1 - T2 -
venous lake가
(9).
CT 가 MR
MR
T1
(2).
가
1 2
T2 - (3-5).
가
가
가
T2 -
가
가
가
(6), 1
가 1
B - cell
가
가
가
Mulliken (8)
가
가
가
T1 -
T2 -
(9).
가

1. Tart RP, Kotzur IM, Mancuso AA, Glantz MS, Mukherji SK. CT and MR imaging of the buccal space and buccal space masses. *Radiographics* 1995;15:531-550
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Buccal Space Lesions: A New Classification Based on CT and MR Imaging Findings¹

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Purpose: To present a new classification based on the CT and MR imaging findings of buccal space lesions, and to propose guidelines for their radiologic differentiation.

Materials and Methods: Sixty-two histopathologically confirmed or clinically diagnosed buccal space lesions were classified on the basis of their morphologic appearance and extension to adjacent space as either (1) a mass with a distinct margin, confined to the buccal space; (2) a mass with surrounding infiltration, confined to the buccal space; or (3) a multi-space occupying mass.

Results: Type 1 included pleomorphic adenoma, ex-pleomorphic adenoma, carcinoma, B-cell lymphoma, acinic cell carcinoma, rhabdomyosarcoma, glomus tumor and ameloblastoma, and differentiation between malignant and benign neoplasms was not possible. Type 2 included adenoid cystic carcinoma, abscess, complicated dermoid cyst, and Kimura disease. T-cell lymphoma, neurofibroma, vascular malformation, inflammation, and foreign body granuloma pertained to type 3, and each type-3 entity showed different imaging characteristics.

Conclusion: This new classification based on CT and MR imaging characteristics may provide useful guidelines for predicting the differential diagnosis of buccal space lesions.

Index words : Computed tomography (CT), Magnetic Resonance (MR), Buccal Space

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