

Natural Killer/T

:

1

2

: NK/T (CT) (MR)

: NK/T 21
CT 21, MR 3 3 가

1) , 2) , 3)
, 4)

: 21 (diffuse thickening) , (polyp)

12 (12/21, 57%) 1 20 (20/21, 95%)

16 (16/21, 76%)

14 (14/21, 67%)

3 (3/21, 14%),

11 (11/21, 52%)

: NK/T

NK(natural killer)/T Revised (bulky)

European - American lymphoma (REAL) classification

(6),

(angiocentric) (1),

NK/T

WHO (World Health Organization) classification T -

, NK/T

(nasal - type extranodal) NK/T -

(7 - 12).

(2).

NK/T (lethal midline
granuloma), (progressive

lethal granulomatous ulceration), (malignant

NK/T

granuloma), (polymorphic reticulosis),

(midline malignant reticulosis)

(3, 4)

NK/T

NK/T

8%

45%

(5).

1998 1

NK/T

21

2004 11

30

CT

MR

NK/T

17

76

50

2005 7 1 2005 10 10

가 16 , 가 5 . Ann Arbor (n=2) .
 IE 15 , IIE 1 , IIIE 3 , IV 2 : 21 (21/21, 100%)
 21 CT 21 , MR 3
 . CT 5 mm
 . CT 20
 T1 (TR/TE=600/10 msec), T2
 (TR/TE=2000/80 msec)
 gadopentate dimegulmine (Gd-DTPA) (Magnevist , Schering, Germany)
 CT MR
 (diffuse thickening), (polypoid)

9 (9/21, 43%) (Fig. 1),
 12 (12/21, 57%) (Fig. 2)
 2 (2/21, 10%) (Fig. 3)
 : 21 20 (20/21, 95%)
 16 (16/21, 76%) , (ala)
 가 3 (3/21, 14%), 가 13
 (13/21, 62%, Fig. 3) 9 (9/21, 43%)

Table 1. Imaging Feature of 21 Lesions

Characteristics	Case, n (%)
Mass pattern	
Diffuse thickening	21 (100)
Diffuse thickening only	9 (43)
With small polypoid mass	10 (47)
With large polypoid mass	2 (10)
Bone change	14 (66)
Erosion	11 (52)
Destruction	3 (14)
Extension to adjacent tissue	20 (95)
Subcutaneous tissue	16 (76)
Orbit	9 (43)
Paranasal sinus	17 (81)
Oro-, naso-pharynx	2 (10)

Note.- n = number.

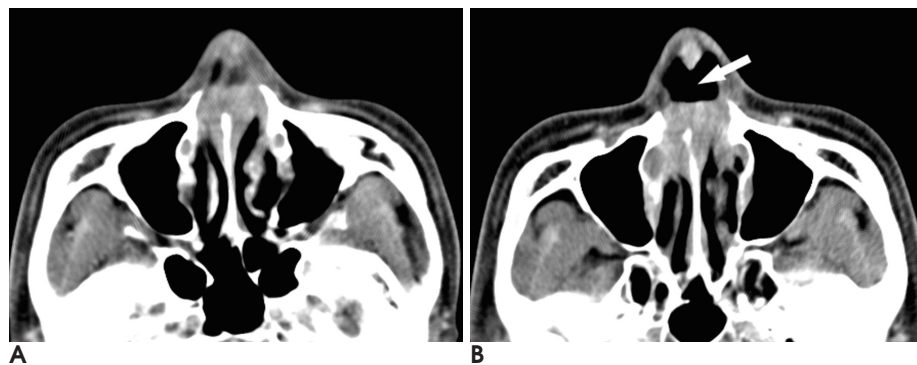


Fig. 1. A 38-year-old man with bilateral nasal obstruction and rhinorrhea. Axial CT with contrast enhancement (A and B) shows diffuse mucosal thickening without polypoid mass in bilateral nasal cavity and septal perforation (arrow).

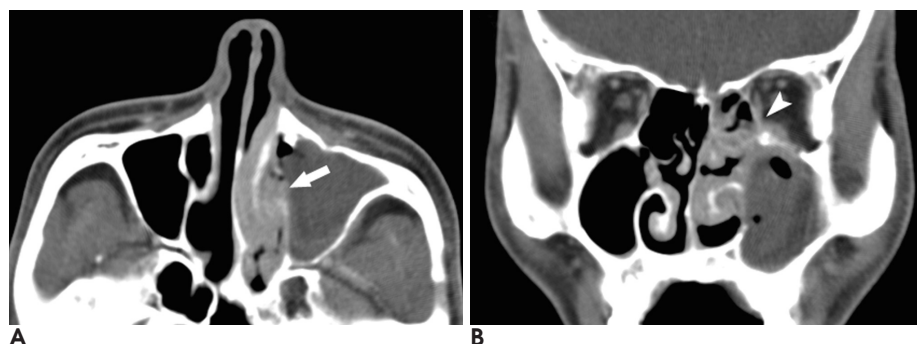


Fig. 2. A 44-year-old man with left nasal obstruction and nasal pain. Axial CT with enhancement (A) shows left nasal mass without expansion (arrow) and coronal CT (B) shows bone erosion (arrow head) of lamina papyracea.

(lamina papyracea)

4 (4/9, 44%), 3 (3/9, 33%), (nasolacrimal duct) 1 (1/9, 11%), (pterygopalantine fossa) (inferior orbital fissure)

(carvernous sinus) 가 1 (1/9, 11%) 1 (Fig. 4).

17 (17/21, 81%) 14 (14/21, 67%) 가 13 (13/21, 62%)

(mild) 가 19 (19/21, 90%) 가 (moderate) 1 (1/21, 5%), 가 1 (1/21, 5%) : 14 (14/21, 66%) 가 11 (11/21, 52%) (Fig. 2), 가 3 (3/21, 14%) (Fig. 3)

가 NK/T NK/T

NK/T

Ebstein - Barr NK/T

CD2, CD3e (CD3 T), CD56

45% (5).

(7 - 10, 13).

CT MR

(11, 14).

NK/T

(13, 15).

(16, 17), T

1 %가 NK/T

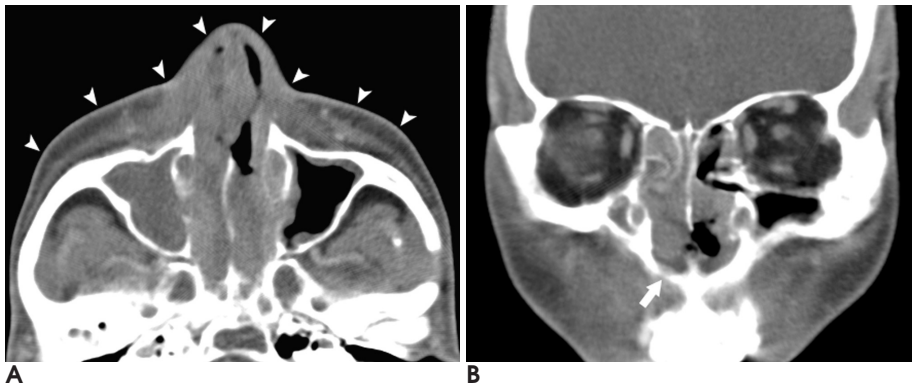


Fig. 3. A 58-year-old man with bilateral nasal obstruction and rhinorrhea. Axial CT (**A**) shows mild expansile mass in right nasal cavity and swelling and infiltration involving nasal ala and the cheek on both sides (arrowheads). Coronal CT (**B**) shows bone destruction in ipsilateral maxilla (arrow)



Fig. 4. A 56-year-old woman with diplopia and decreased visual acuity. T1-weighted axial (**A**) and coronal images (**B**) shows soft tissue mass in right posterior nasal cavity and pterygopalantine fossa (arrowheads). The lesion extended cavernous sinus (arrows) and inferior orbital fissure (black arrow) on postcontrast T1-weighted coronal images (**C**).

(18). NK/T
가 95% , NK/T
86% 가 .
NK/T
NK/T
가
NK/T MR T1 -, T2 - weighted images
(intermediate)
T2 weighted image
(10),
가
(19).
62% (12) 가
가
가
가
가
가
(11, 12, 20).
(11/14, 76%), 가
21
2
가
CT
MR CT
(9),
NK/T
가

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Imaging Features of Nasal-Type Natural Killler/T-cell Lymphomas: Frequent Involvement of Skin and Subcutaneous Tissue¹

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Purpose: We wanted to evaluate the radiologic characteristics of nasal-type NK/T cell lymphomas.

Materials and Methods: We reviewed twenty-one cases of pathologically proven nasal-type NK/T-cell lymphomas. CT scans were obtained for 21 patients, MR image were obtained for 3 patients, and both CT and MR scans were obtained for 3 patients. The imaging features regarding patterns of the masses, extension to adjacent tissue, bony changes and the degree of contrast enhancement were evaluated.

Results: All of the 21 patients had diffuse mucosal thickening and 12 patients (12/21, 57%) also had polypoid masses. Nasal cavity lesions showed extension to the adjacent tissue in 20 cases (20/21, 95%). Adjacent bone erosion or destruction was noted in 14 cases (14/21, 67%) and the bone destruction was mild.

Conclusion: Nasal-type NK/T-cell lymphomas revealed a tendency to involve the superficial soft tissue and to extend into the adjacent structures. The typical imaging features of nasal-type NK/T-cell lymphoma were diffuse infiltrative lesion with or without polypoid masses in the nasal cavity and frequently extension to adjacent soft tissue, and especially the subcutaneous tissue.

Index words : Lymphoma, CT
Lymphoma, MR
Head and neck, neoplasms

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