

1

:
 : 8 (: = 7:1, 9-41 , 17)
 5 , 3 ,
 : 4가 1
 (n = 3)
 10 mm
 2 (n = 3) 가 가
 3 (n = 1)
 4 (n = 1) T1, T2
 가
 : 가

(pilonidal sinus) (pilus:hair) (nidus: nest) 11 8
 1880 Hodges가 , 7 ,
 (sacroccocygeal area) (hair) 1 , 9 41 ,
 (1). (fol - 17 10 가 5 (Table 1). 1
 licular cyst) (natal cleft) 10 가 5
 (keratin plugs)가 , 3
 , , , (midline pit) 3
 (2, 3). 1.5T Magnetom
 (Siemens, Erlangen, Germany) 1.5T GE Signa (GE
 Medical system, Milwaukee, Wisconsin, U.S.A.)
 (morbidity) 가 (4). T1 (TR/TE = 400 -
 650/12 - 20 msec) T2
 (TR/TE = 3000 - 5200/95 - 132 msec)
 (field of view)=20×30 - 16×16 cm,
 matrix = 259×192, (slice thickness)=4 - 6 mm
 (parameter) (sagittal)
 (coronal) T1, T2 , Gadolinium -
 DTPA (Magnevist, Schering, Germany) 0.1 mmol/kg

1994 7 1999 5

1

2000 4 25 2000 9 20

가

(irregular trabecular subcutaneous fatty infiltration)
(Fig. 1). T1, T2

47가

1 (n = 3)

1 cm
(fat lobules)

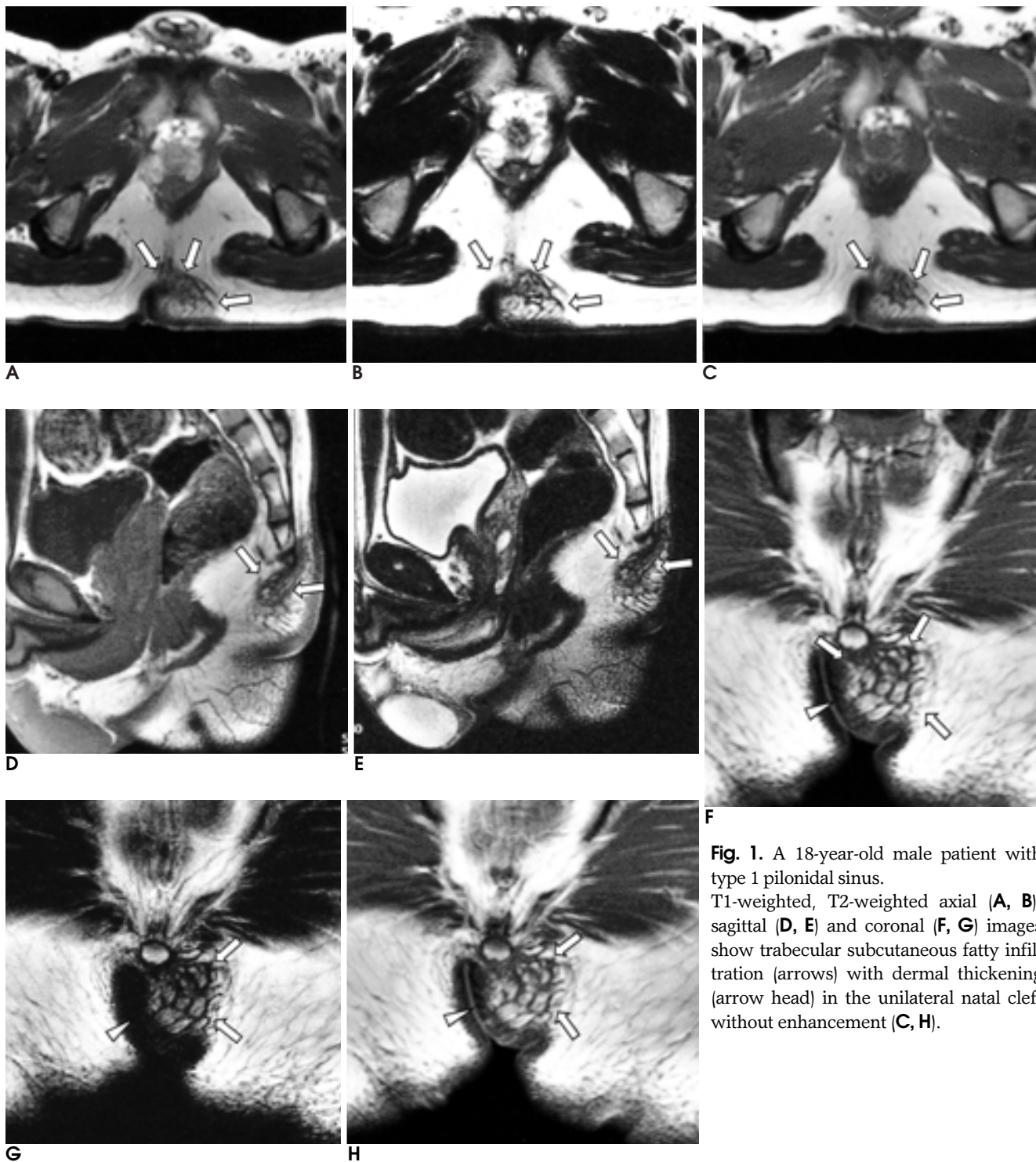


Fig. 1. A 18-year-old male patient with type 1 pilonidal sinus. T1-weighted, T2-weighted axial (A, B), sagittal (D, E) and coronal (F, G) images show trabecular subcutaneous fatty infiltration (arrows) with dermal thickening (arrow head) in the unilateral natal cleft without enhancement (C, H).

2 (n = 3) 가
 가 (Fig. 2).
 , T1, T2
 , 1
 , 2
 3 (n = 1)
 (air - fluid level) (Fig. 3).
 3).

Table 1. Summary of Clinical Findings in 8 Patients with Sacrococcygeal Pilonidal Sinus

Case	Age / Sex	Symptom		Duration	Midline pit	Discharge	Type
		Sacroccygeal mass	Pain				
1	9/F	(+)	(-)	2 Years	(-)	(-)	I
2	17/M	(+)	(-)	3 Years	(-)	(-)	I
3	18/M	(+)	(-)	3 Years	(-)	(-)	I
4	36/M	(+)	(+)	10 Years	(-)	(-)	II
5	41/M	(+)	(+)	10 Years	(+)	(+)	II
6	17/M	(+)	(+)	6 Months	(+)	(+)	II
7	16/M	(+)	(+)	1 Month	(-)	(+)	III
8	18/M	(+)	(+)	1 Year	(+)	(-)	IV

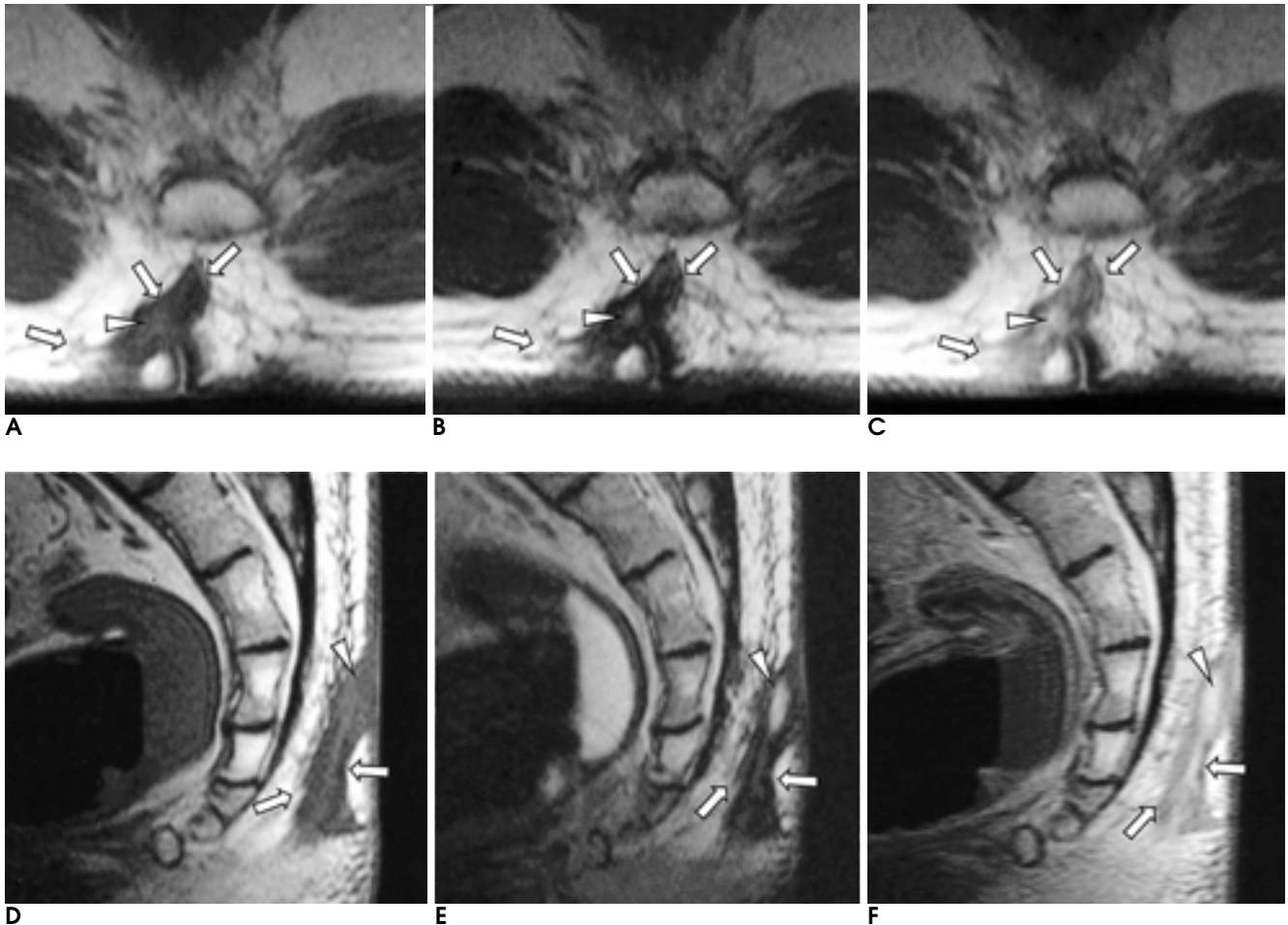


Fig. 2. A 41-year-old male patient with type 2 pilonidal sinus.

T1-weighted axial (A) and sagittal (D) images show low signal intense sinus tract (arrows) in subcutaneous layer and isointensity of inner content (arrow head). T2-weighted axial (B) and sagittal (E) images show low signal intense sinus tract (arrows) and hyperintensity of inner content (arrow head). Gd-enhanced axial (C) and sagittal (F) images show enhanced sinus wall (arrows) and inner content (arrow head). The sinus tract runs cranially, not communicate with the anal canal.

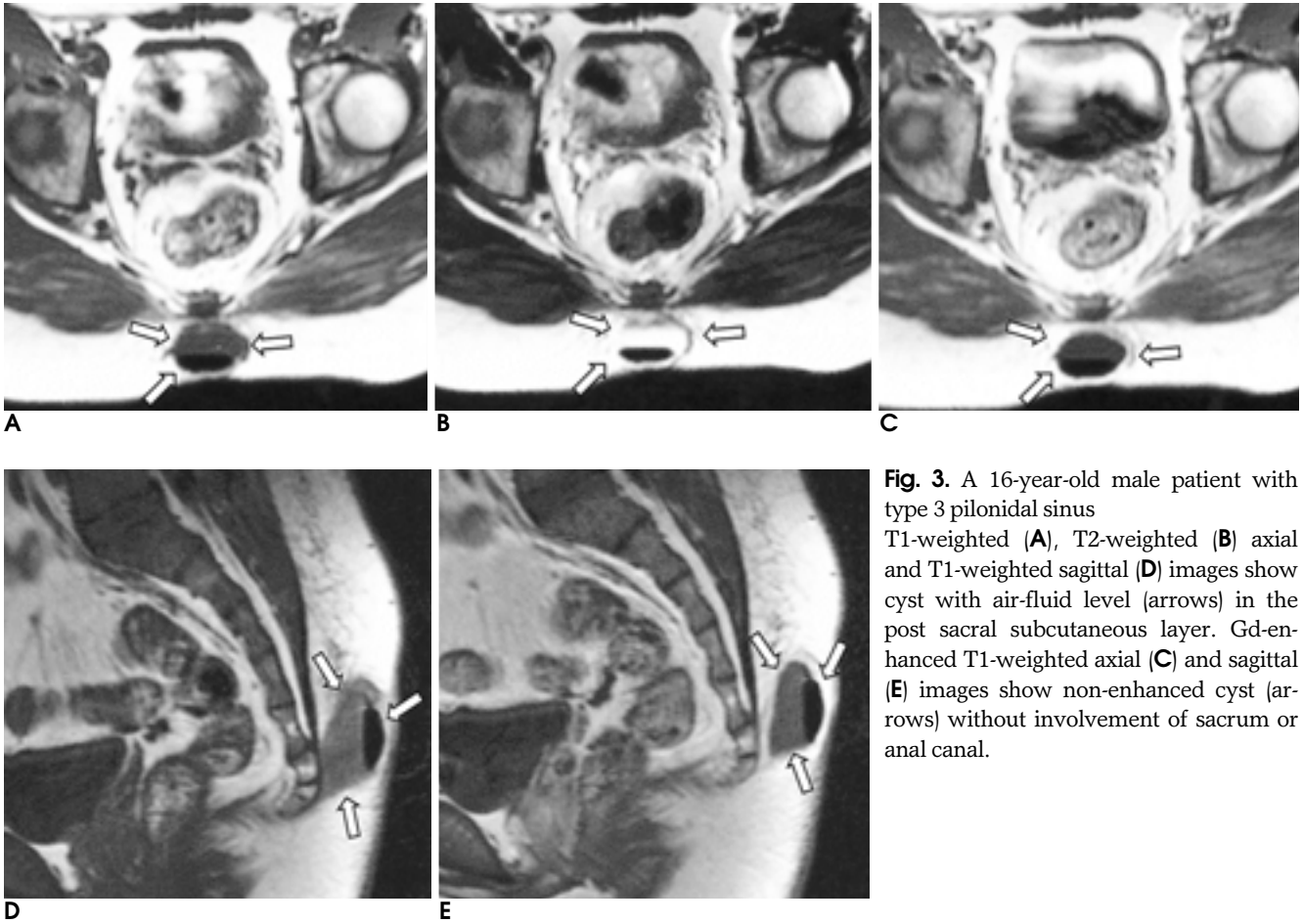


Fig. 3. A 16-year-old male patient with type 3 pilonidal sinus. T1-weighted (A), T2-weighted (B) axial and T1-weighted sagittal (D) images show cyst with air-fluid level (arrows) in the post sacral subcutaneous layer. Gd-enhanced T1-weighted axial (C) and sagittal (E) images show non-enhanced cyst (arrows) without involvement of sacrum or anal canal.

4 (n = 1) T1, T2 (2, 5, 6).
 (Fig. 가 3 가 (2).
 4). (granulation tissue) , 가 ,
 (lining) 4 (2, 4) (4). 가 (84%) (78%)
 (cranially) . T1, T2 (3).
 1 1 1 7 6
 (dead hair) . (5).
 3
 glands) (vestigial scent (1, 7). 16 - 20
 가 25 가 (1, 3).
 (2 - 5). (buttock friction), , 가
 (midline pit) 5 cm 10 , 30, 40 5 (63%)가
 (.) 가 .

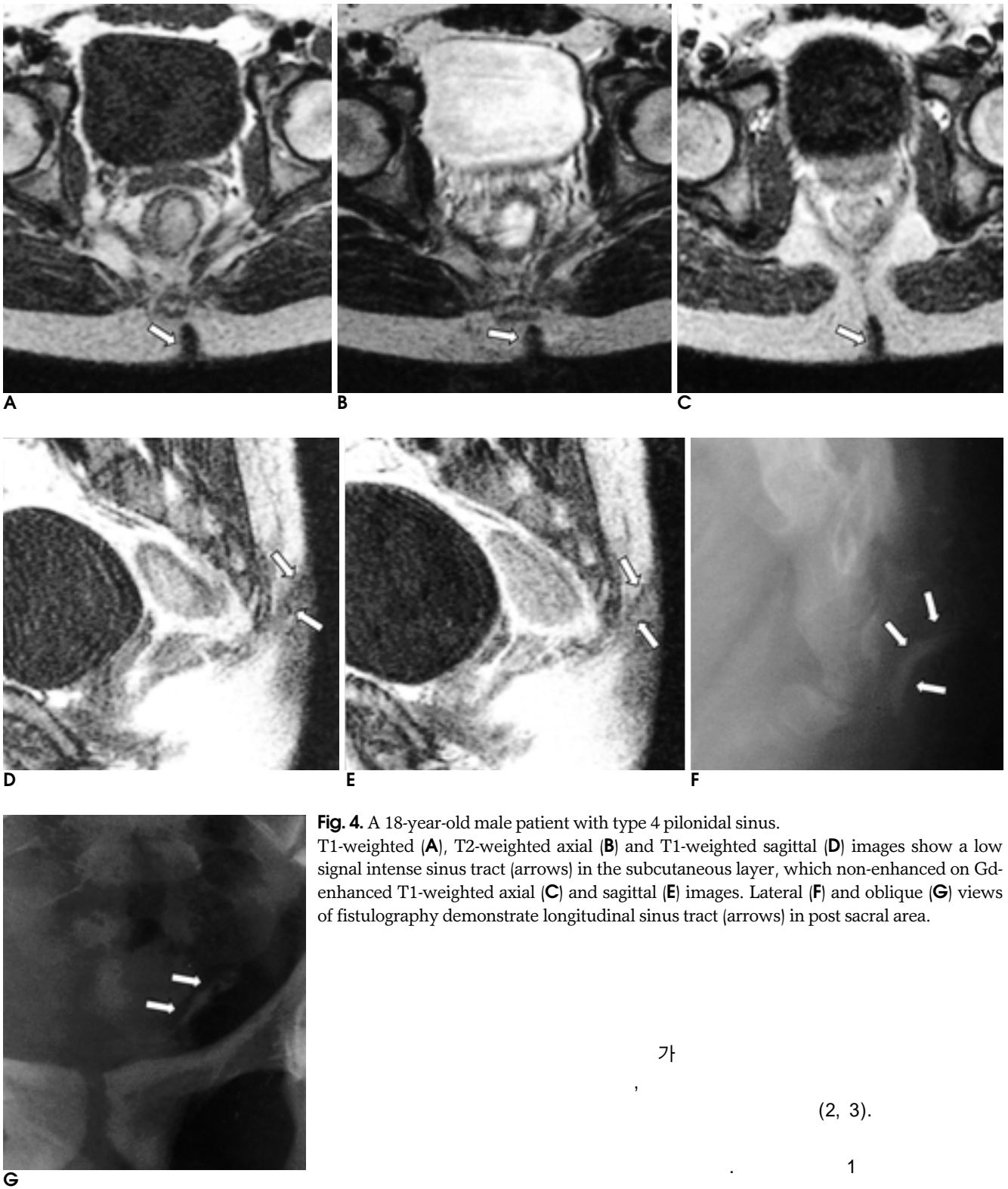


Fig. 4. A 18-year-old male patient with type 4 pilonidal sinus. T1-weighted (A), T2-weighted axial (B) and T1-weighted sagittal (D) images show a low signal intense sinus tract (arrows) in the subcutaneous layer, which non-enhanced on Gd-enhanced T1-weighted axial (C) and sagittal (E) images. Lateral (F) and oblique (G) views of fistulography demonstrate longitudinal sinus tract (arrows) in post sacral area.

가

(2, 3).

1

3

가

(pilonidal granuloma)

Bascom

가

가

(2, 3).

가

2, 4

가 (pilonidal cavity)

가

93%

가

(3).

(6, 8).

가

가

(sacroccocygeal

teratoma),

(post - anal dermoid),

(epi -

dermoid)

(post -

anal dimple),

(congenital dermal sinus),

(3, 7, 9).

(10).

가

(epithelium lined dural tube)

(10).

(midline dimple)

가

(hyperpigmented patch),

(hairly nevus),

(capillary angioma)

(10).

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MR Imaging of Sacrococcygeal Pilonidal Sinus¹

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Purpose: The purpose of this study is to evaluate the characteristic MR findings of sacrococcygeal pilonidal sinus.

Materials and Methods: Eight MR images of pathologically proven sacrococcygeal pilonidal sinus were retrospectively reviewed [M: F = 7: 1; age range 9-41 (median, 17) years]. In all cases, a sacrococcygeal mass was present. Five of the eight patients experienced pain, and in three was discharge. MR findings were evaluated with regard to the location and extent of the lesion, and the presence of sinus or cyst, and the results were compared with the pathologic findings.

Results: According to the clinical manifestations, each case was assigned to one of four groups: the first type (n = 3) showed dermal thickening with subcutaneous fatty infiltration of the ipsilateral natal cleft while pathologically, a follicular cyst with dermal fibrosis and multiple fatty lobules with fibrous septa were found to be present. In the second type (n = 3), fluid was observed in the sinus tract, while the pathologic findings demonstrated the presence of an abscess in this area. In the third type (n = 1), a cystic lesion with air-fluid level was present; pathologically, an abscess was revealed. The fourth type (n = 1) showed only a low signal intensity sinus tract on both T1 and T2-weighted images, while the pathologic findings indicated the presence of hairs and follicles within the tract.

Conclusion: The MR findings of sacrococcygeal pilonidal sinus depend on the clinical manifestation and include subcutaneous fatty infiltration, a sinus tract with or without fluid retention, and a cystic lesion with air fluid level. These findings could be helpful for differentiating between this and other sacrococcygeal lesions.

Index words : Skin, disease
Skin, MR

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