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Two Cases of Nasal Septal Abscess with Uncontrolled Diabetes Mellitus

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We encountered two cases of nasal septal abscess in patients with uncontrolled diabetes mellitus. When a diabetic patient presents with bilateral nasal obstruction, it is important to remember the possibility of nasal septal abscess.

Introduction

Nasal septal abscess is an uncommon condition among nasal cavity diseases. It has been reported that the typical causes of nasal septal abscess are deviatomy and trauma. Patients who have nasal septal abscess usually present with bilateral nasal obstruction. We encountered two cases of nasal septal abscess associated with uncontrolled diabetes mellitus. These patients are reported here with a review of the relevant.

Cases

Case 1 was a 62-year-old woman who presented on June 25, 1999 with bilateral nasal obstruction. This symptom had developed 14 days before presentation and had not shown any improvement. She had a past history of diabetes

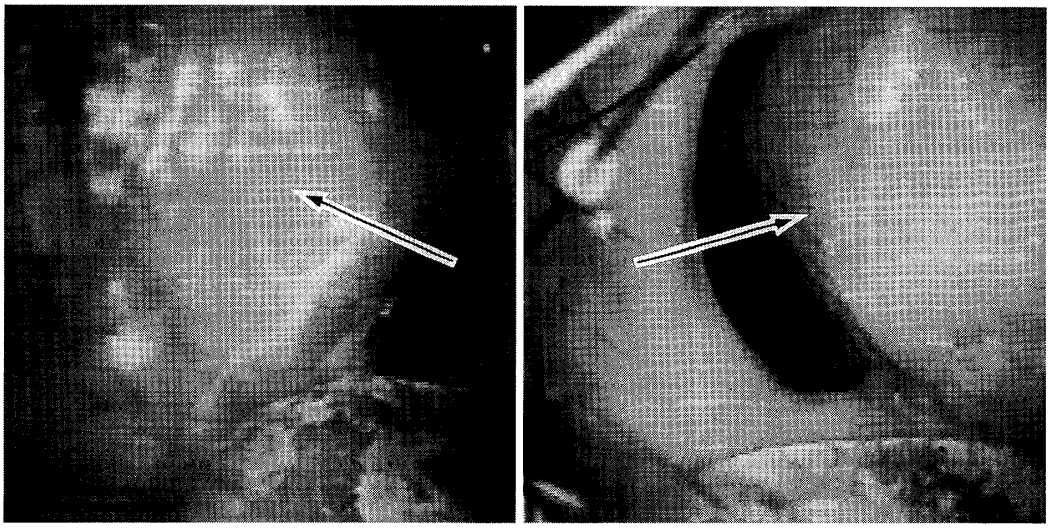

Fig. 1 Opinion in nose on first examination in case 1
Bilateral swelling of the nasal septum.
Left: left nasal cavity, Right: right nasal cavity.

mellitus (uncontrolled) and hypertension. On examination, there was bilateral swelling of the nasal septum (Fig. 1).

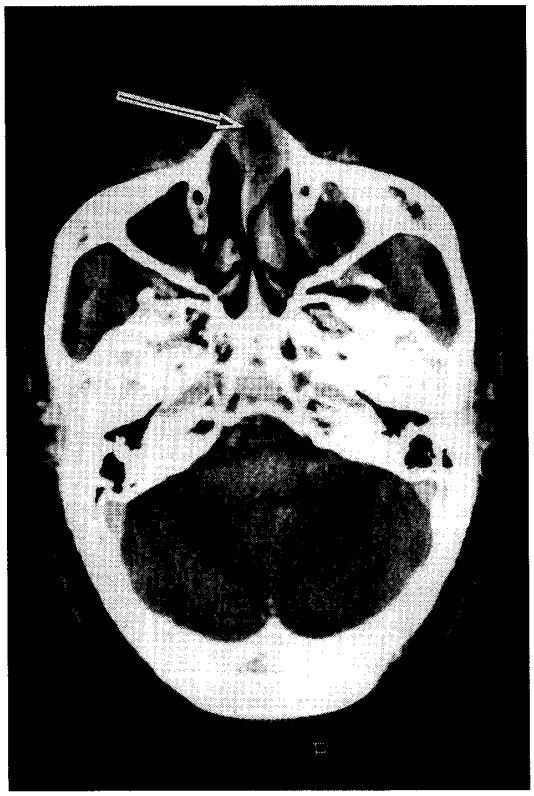

Fig. 2 Computed tomography of the head swelling of nasal septum and a low density area was detected in the nasal septum in case 2.

Laboratory tests revealed a WBC of 6400/μl, a CRP of 0.38 mg/dl, and a blood glucose of 311 mg/dl. Her septal swelling was considered to be caused by a nasal septal abscess, so aspiration was performed and 0.5～1.0 ml of pus was removed from the lesion. Only normal flora was detected by bacteriolgical examinations. She was treated with intravenous antibiotics (Cephopirom at 1 g/day + Clindamycin at 600 mg/day) and her abscess resolved after 14 days.

Case 2 was a 49-year-old man who presented on July 27, 1999 with bilateral nasal obstruction. Epistaxis had occurred after an injury to the nose 18 days before presentation. Bilateral nasal obstruction was noted when his epistaxis resolved after several days and this symptom was persis-

Table 1 Causes of the nasal septal abscess

Traumatic	Surgery	Deviatomy
	Trauma	Facial injury
		Birth injury
Infections		Infection of the nasal vestibule
		Dental disease
		Otitis media
		Infection of the paranasal sinuses
Idiopathic		

Table 2 Cases of nasal septal abscess reported in Japan since 1985

	Arthor	Age(yr)	Sex	DM	Cause	Complication
1985	Yoshida	10	F	Uncertain	Idiopathic	
1985	Tanaka	6	M	Uncertain	Traumatic	
1986	Nishiura	55	M	Uncertain	Idiopathic	
1986	Nishiura	57	M	Uncertain	Idiopathic	
1988	Hanada	67	M	−	Tuberculosis	
1990	Sakai	4	M	−	Idiopathic	
1990	Sakai	62	M	−	Idiopathic	
1991	Yamamura	14	M	−	Idiopathic	
1993	Takizawa	65	M	+	Idiopathic	Subarachnoid abscess
1994	Fukami	48	M	−	Idiopathic	
1994	Fukami	6	M	−	Idiopathic	
1994	Fukami	57	M	−	Idiopathic	
1994	Fukami	14	M	−	Traumatic	
1997	Kuroishikawa	53	F	−	Sphenoid sinusitis	

tent. He had a past history of diabetes mellitus. On examination, there was bilateral swelling of the nasal septum.

Laboratory tests revealed a WBC of 6100/μl, CRP of 0.45 mg/dl, and a blood glucose of 278 mg/dl. Septal swelling was thought to be caused by a nasal septal abscess. A low-density area was detected in the septum by computed tomography on July 29 (Fig. 2), and 5 ml of pus was removed from this lesion. *Streptococcus pneumoniae* (PRSP) was detected by bacteriological tests. He was treated with oral Ofloxacin (300 mg/day), and the abscess resolved after 11 days.

Discussion

Nasal septal abscess is classified as being due to injury or infection, as well as idiopathic cases (Table 1). Our case 1 caused idiopathic and our case 2 was secondary to injury.

Diabetes mellitus was present in both of our patients, there have been no reports of a relationship between diabetes and nasal septal abscess[1)~6)], but we considered that increased susceptibity to infection in diabetics may be involved because there has been earlier case report of a patient with septal abscess and diabetes[4)]. Table 2 shows the cases of nasal septal abscess cases that have been reported in Japan since 1985. Only one other patient had diabetes[4)], but this patient had the serious complication of subarachnoid abscess. Therefore, it is necessary to treat patients while considering the possibility of serious complications when septal abscess is associated with diabetes mellitus.

In particular, when bilateral nasal obstruction occurs in a patient with uncontrolled diabetes mellitus (like our two cases), the diagnosis of septal abscess must be suspected.

Conclusion

We experienced two cases of nasal septal abscess associated with uncontrolled diabetes mellitus. When a diabetic patient presents with bilateral nasal obstruction, it is important to remember the nasal septal abscess since this condition can have serious complications.

References

1) **Hanada T, Ajisaka K, Shima T et al**: A case of nasal tuberculosis with septal abscess. Otolaryngol Head Neck Surg (Tokyo) **60**(3): 227–230, 1988 (in Japanese)
2) **Sakai N, Takizawa M, Sato N**: Two cases of nasal septal abscess. Otolaryngol Head Neck Surg (Tokyo) **62**(12): 1095–1098, 1990 (in Japanese)
3) **Yamamura K, Ishimaru T, Nagafuchi S et al**: A case of remarkable effect of clindamycin in nasal septal abscess caused by *Streptcoccus milleri*. Jpn J Assoc Infect Dis **65**(10): 1369–1373, 1991 (in Japanese)
4) **Takizawa R, Watanabe H, Ohnishi M**: Subdural empyema of skull base secondary to nasal septal abscess. Otolaryngol-Head Neck Surg (Tokyo) **65** (9): 775–778, 1993 (in Japanese)
5) **Fukami S, Shimada H, Nagae D et al**: Four cases of "nasal septal abscess". Pract Otol **70**: 84–88, 1994 (in Japanese)
6) **Kuroishikawa Y, Miyashita H, Maeda S et al**: A case of nasal septal abscess due to sphenoiditis. Oto-Rhino-Laryngol Tokyo **40**(4): 434–437, 1997 (in Japanese)

未治療の糖尿病に合併した鼻中隔膿瘍の2症例

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我々は2例の鼻中隔膿瘍症例を経験した．2例とも未治療の糖尿病を合併していた．糖尿病を合併した鼻中隔膿瘍は重篤な合併症を引き起こす可能性があり，注意を要する．