

# Spontaneous Isolated Nasal Septal Cellulitis After Renal Transplant

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## Citation

A Sethi, D Sareen, S Mrig, A Agarwal. *Spontaneous Isolated Nasal Septal Cellulitis After Renal Transplant*. The Internet Journal of Otorhinolaryngology. 2007 Volume 8 Number 1.

## Abstract

**Background:** Isolated head and neck infections following a renal transplant are rare. We report one such case.

**Aims:** To report the case of an isolated spontaneous cellulitis of nasal septum in a post renal transplant patient and to briefly review the pertinent literature on isolated head and neck infections in this state.

**Setting:** A tertiary health care center.

**Design:** A retrospective case review.

**Results:** The patient responded well to the management and is asymptomatic for the disease 6 months following the treatment.

**Conclusions:** Isolated nasal infections are very rare in renal transplant recipients and isolated spontaneous nasal septal cellulitis is still rarer with no case reported in the literature in our search of pertinent medical literature.

## INTRODUCTION

Infections continue to remain a major clinical concern in the management of renal transplant recipients, affecting the graft and patient survival [1]. Isolated nasal infections in such patients are uncommon and are usually in the form of invasive fungal infections [2], viral infections [3] or bacterial nasal abscess [4]. In the review of medical literature, we did not find any case presenting with isolated nasal septal cellulitis following a renal transplant. The extreme rarity of such a presentation prompted us to report this case.

## CASE REPORT

A 32-year-old male patient presented to us with a painful swelling of the nasal septum of two days duration (Figure 1).

## Figure 1

Figure 1: Showing bilateral swelling of the nasal septum.



There was no history of fever, nasal trauma or bleed. The patient underwent living donor kidney transplant eight weeks prior to his presentation to us. He was on immunosuppressants in the form of cyclosporine, mycophenolate mofetil and steroids. His postoperative course was uneventful and he was stabilized at a serum creatinine of 1.4 mg./dl. He was non-diabetic.

Aspiration of the swelling yielded a dirty brown colored, foul-smelling fluid, which on culture grew a mixed flora of gram positive and negative organisms. An incision was placed at the anterior end of septum, after surface anaesthesia with 4% xylocaine, and the cellullitic fluid was drained. The patient was admitted in isolation and was put on intravenous antibiotics in the form of ceftriaxone and metronidazole. The incision was repeatedly dilated with expression of some fluid for three days following which the fluid subsided. The patient was discharged after a week with complete cure. The patient is well six months post-transplantation.

### DISCUSSION

Isolated head and neck infections are uncommon in non-diabetic renal transplant recipients. Bacterial infections in this group include sinusitis, otitis media, dental abscess, parotitis, Ludwig's angina and nasal abscess [4]. Our patient presented with cellulitis of the nasal septum.

The microbiology of these bacterial infections has been found to be similar to that occurring in non-immunosuppressed individuals in some reports [4], whereas, Enterobacteriaceae have been seen to be responsible for most of the bacterial infections in others [1]. Our patient was found to have a mixed flora of gram positive and negative organisms on the culture of cellullitic fluid. This is seen in most of the cases of head and neck cellulitis even in non-immunosuppressed individuals. The other reported infectious agents responsible for causing isolated nasal infections in such individuals include fungi [2], viruses [3] and mycobacteria [5].

The other isolated nasal pathologies reported in post-transplant patients include tumours [6,7] and spontaneous septal perforations [8]. Our patient did not have any such

pathology.

All the patients with septal abscess or cellulitis require a prompt surgical management due to the risk of complications in the form of necrosis of septal cartilage, and rarely, cavernous sinus infection. Our patient was managed on similar lines with prompt surgical drainage. The patient responded well without any complications.

In conclusion, isolated spontaneous cellulitis of the nasal septum in a post-renal transplant patient is a rare occurrence. The condition requires a prompt surgical intervention along with adequate intravenous antibiotic coverage.

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