MRSA Nasal Abscess after Elective Septorhinoplasty

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ABSTRACT

Present a case of a MRSA nasal abscess after elective septorhinoplasty. Discuss the role for MRSA screening and decolonization prior to elective nasal surgery.

RESULTS

The patient was taken to the operating room for incision and drainage of a nasal soft tissue and septal abscess by partially resecting the left marginal and left hemitransfixion incisions. An amount of purulent fluid was evacuated from the surgical site and sent for culture. At the time of operative exploration the preoperative nasal septal cartilage grafts and a significant portion of the remaining septal cartilage appeared retracted and more retracted. The abscess cavity with associated purulent fluid was evacuated, and the grafts were harvested and sent for culture. The abscess cavity was then packed with antibiotic-impregnated gauze. Surgical culture and beta lactamase testing were performed at the time of incision and drainage. Culture and beta lactamase testing were performed prior to the procedure. In response to the increasing incidence of MRSA colonization and the severity of MRSA-related sinusitis infections, surgeons have sought to reduce these infections by screening patients for MRSA carriage preoperatively. Numerous publications have demonstrated an increase in the number and severity of surgical site infections following the implementation of MRSA screening and screening and decolonization, combined with appropriate choice of anti-MRSA intranasal antibiotic therapy. However, few prospective studies investigating the role of MRSA decolonization in patients undergoing nasal surgery have been conducted. We describe a case of a nasoseptal abscess presenting six days after septorhinoplasty causing significant morbidity following elective functional septorhinoplasty. This case of a severe infectious complication caused by MRSA following septorhinoplasty raises a number of important questions. Could pre-operative screening for MRSA followed by decolonization have prevented this complication and need for resection surgery? Can the colonization and infection be prevented in the setting of minimal surgical incision and drainage? The purpose of this study is to present a case of a severe infectious complication caused by MRSA following septorhinoplasty.

DISCUSSION

In general, post-operative infectious complications following septorhinoplasty are uncommon, occurring in less than 2% of cases.1 One suggested explanation for this low incidence relates to the highly vascular nature of the nose and septum. Specifically, surgical site infections in rhinoplasty patients due to MRSA are extremely rare despite the fact that the prevalence of MRSA colonization is increasing among the general population, and the nares are the primary bacterial reservoir in MRSA carriers. To our knowledge, there is only one other report in the literature, and this occurred over 25 years ago. In response to the increasing incidence of MRSA colonization and the severity of MRSA-related sinusitis infections, surgeons have sought to reduce these infections by screening patients for MRSA carriage preoperatively. Numerous publications have demonstrated an increase in the number and severity of surgical site infections following the implementation of MRSA screening and screening and decolonization, combined with appropriate choice of anti-MRSA intranasal antibiotic therapy. However, few prospective studies investigating the role of MRSA decolonization in patients undergoing nasal surgery have been conducted. We describe a case of a severe infectious complication caused by MRSA following septorhinoplasty. This case of a severe infectious complication caused by MRSA following septorhinoplasty raises a number of important questions. Could pre-operative screening for MRSA followed by decolonization have prevented this complication and need for resection surgery? Can the colonization and infection be prevented in the setting of minimal surgical incision and drainage? The purpose of this study is to present a case of a severe infectious complication caused by MRSA following septorhinoplasty.

REFERENCES


METHODS AND MATERIALS

The patient was a 33 year-old male with nasal airway obstruction underwent open functional septorhinoplasty. Six months post-operatively, he presented with a nasal abscess. He was treated pre-operatively with intranasal Mupirocin ointment for two weeks and intranasal saline irrigations. Despite the well-documented role of MRSA in surgical site infections in other specialties, such infections following septorhinoplasty are extremely rare with only one previously published case. We will present a case of a nasoseptal abscess causing significant morbidity following elective nasal surgery.

Figure 1: Axial CT scan demonstrating nasoseptal abscess.

Figure 2: Coronal CT scan demonstrating nasoseptal abscess.

Figure 3: Six months post incision and drainage of nasoseptal abscess demonstrating saddle nose deformity.

Figure 4: Six months post partial nasal septal graft reconstruction.