

Retrieval of foreign body from a postoperative defect in the mandible during the follow-up period: A bizarre occurrence

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ABSTRACT

Though reported cases of foreign bodies left intraoperatively in the oral cavity are very few, there is no case mentioned in the literature where foreign body was left behind during follow-up visits. Here, we present an operated case of unicystic ameloblastoma of mandibular ramus region, in which a needle hub was left at the operated site (cavity created because of wound dehiscence) during some of the follow-up visits, which was detected accidentally by radiograph and later on retrieved. The case reported was because of negligence of trainee surgeons, might be because of overburden or because of minimal interest in these repeated follow ups. But, a trainee should understand that their work also has similar importance as that of surgeon's work.

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INTRODUCTION

Foreign bodies are often encountered by oral and maxillofacial surgeons^[1] and may present challenge to the surgeon due to many factors such as the size of the object, the difficult access, and a close anatomical relationship of the foreign body to vital structures.^[2,3] Foreign objects can be left behind following a surgical procedure in any part of the body – most frequently in the abdominal cavity and thorax; although no body cavity is invulnerable.^[4] There has been no case that has been reported till date in the literature where foreign body was incorporated during the follow-up period.

Here, we present an operated case of unicystic

ameloblastoma of mandibular ramus region, in which a needle hub was left at the operated site (cavity created because of wound dehiscence) during some of the follow-up visits, which was detected accidentally by radiograph and later on retrieved.

CASE REPORT

A 16-year-old female patient reported to department of Oral and Maxillofacial Surgery with chief complaint of pain and swelling in left mandibular angle region since last 2 months. After all required radiographic and histopathological investigations, the lesion was diagnosed as ameloblastoma involving left ramus and the angle region. Patient was operated for the same under general anesthesia and enucleation of the lesion was done. Immediate postoperative radiograph was taken for maintaining records as per our institute protocol [Figure 1]. Later on, wound dehiscence occurred and operated area was exposed to oral cavity. Patient was kept on weekly follow up and cavity created because of wound dehiscence was irrigated with 5% Betadine diluted with normal saline on each visit and packed with ribbon gauze impregnated with

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Bismuth Iodoform Paraffin paste to promote secondary healing as per our institute protocol.

After 3 months, patient was advised follow-up radiograph to evaluate the healing and accidentally a radio-opaque streak was detected in operated area [Figure 2]. Another radiograph was taken to rule out any artifact, but again same radio-opacity was detected in the mandibular defect. This indicated that there was a foreign body in the defect which required immediate retrieval.

Under general anesthesia, cavity was explored. A needle hub was retrieved from deeper aspect of the cavity after exploring for a long time [Figure 3].

Later on, it was concluded that needle hub found in the cavity was the part of irrigation syringe, used for toileting of the cavity at follow-up visits [Figure 4]. The follow-up record sheet of the patient had names of four different trainee surgeons who had done the follow up of same patient, but no resident could recollect any event of the hub being misplaced or lost in the cavity.

Inadvertent retention of a foreign body often requires another surgery to recover the material. This increases morbidity and mortality. The Centers for Medicare and Medicaid Services (CMS) includes the retention of a foreign object in its list of hospital-acquired conditions for which reimbursement will not be provided.^[6]

Forgotten or missed foreign bodies, such as cotton sponges, gauze, or instruments, after any surgical procedures are considered a misadventure and is associated with several legal problems. The Joint Commission categorizes the unintended retention of a foreign object as a sentinel event.^[7] Foreign objects can be left behind following a surgical procedure in any part of the body, most frequently in the abdominal cavity and thorax, although no body cavity is invulnerable. In our case, the Retained foreign object (RFO) was located in the iatrogenically created defect in the mandible. Estimates of the incidence of RFOs vary.^[8-10] It may be difficult to arrive at a true estimate of the incidence of RFOs, since an RFO can remain undetected for years and also because of medico-legal problems, these cases are rarely published.^[10] A study involving 1 91 168 surgical

DISCUSSION

The retention of a foreign object is considered a serious preventable event by the National Quality Forum.^[5]

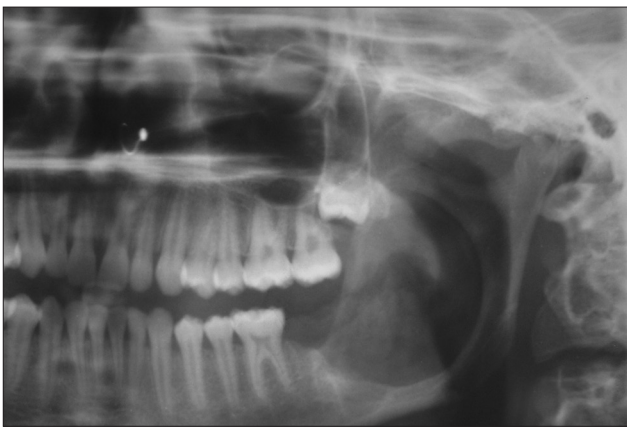


Figure 1: Immediate postoperative radiograph



Figure 3: Retrieved hub from the cystic cavity



Figure 2: Follow-up radiograph showing a radio-opaque streak in left ramus area



Figure 4: Irrigation syringe used for toileting of cavity during follow-up period

procedures in an institution that performed routine postoperative radiographs reported that the incidence of RFOs was 1 in 5°500.19. At our institute, this was the first case of RFO in the oral cavity and that too during the follow-up period and even the literature does not report any such case of RFO in oral cavity during follow-up period.

Some institutions conduct surveillance using routine postoperative screening radiographs and same protocol is being followed at our institute and this help us in conclusion that the hub was not left in cavity intraoperatively, but it was during the follow-up visits. Instruments made of stainless steel are likely to be detected successfully on screening radiographs; however, radiographs are less sensitive in detecting sponges and needles, but in our case, needle hub was spotted in the operated area during follow-up radiographs.^[11,12]

CONCLUSION

In literature, all mentioned cases of retained foreign bodies were because of intraoperative negligence, but in our case it was the follow-up period when foreign body was left in the body cavity. The case reported was because of negligence of trainees, might be because of overburden or because of minimal interest in these repeated follow ups. But, a trainee surgeon should understand that their work also has similar importance as that of surgeon's work. Every step is important; right from preoperative preparation to follow-up visits. It is a team work right from surgeon to trainee to nursing staff. We all should work together for the benefits of patients.

Postoperative radiographs should be advised to rule out any unintentionally left foreign body.

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