



# Post-Operative Bleeding Complications Following Dental Treatment Completed Under General Anesthesia: A Case Report

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## INTRODUCTION

Prolonged bleeding following primary tooth extractions is rare in pediatric patients without a known bleeding disorder. This case report describes the unplanned hospital admission of a pediatric patient with a self-reported history of only atrial septal defect and pulmonary valve stenosis, who experienced prolonged bleeding following dental treatment under general anesthesia. Persistent bleeding prompted hospital admission for monitoring and evaluation, which was further complicated by aspiration pneumonia.

## PATIENT PRESENTATION

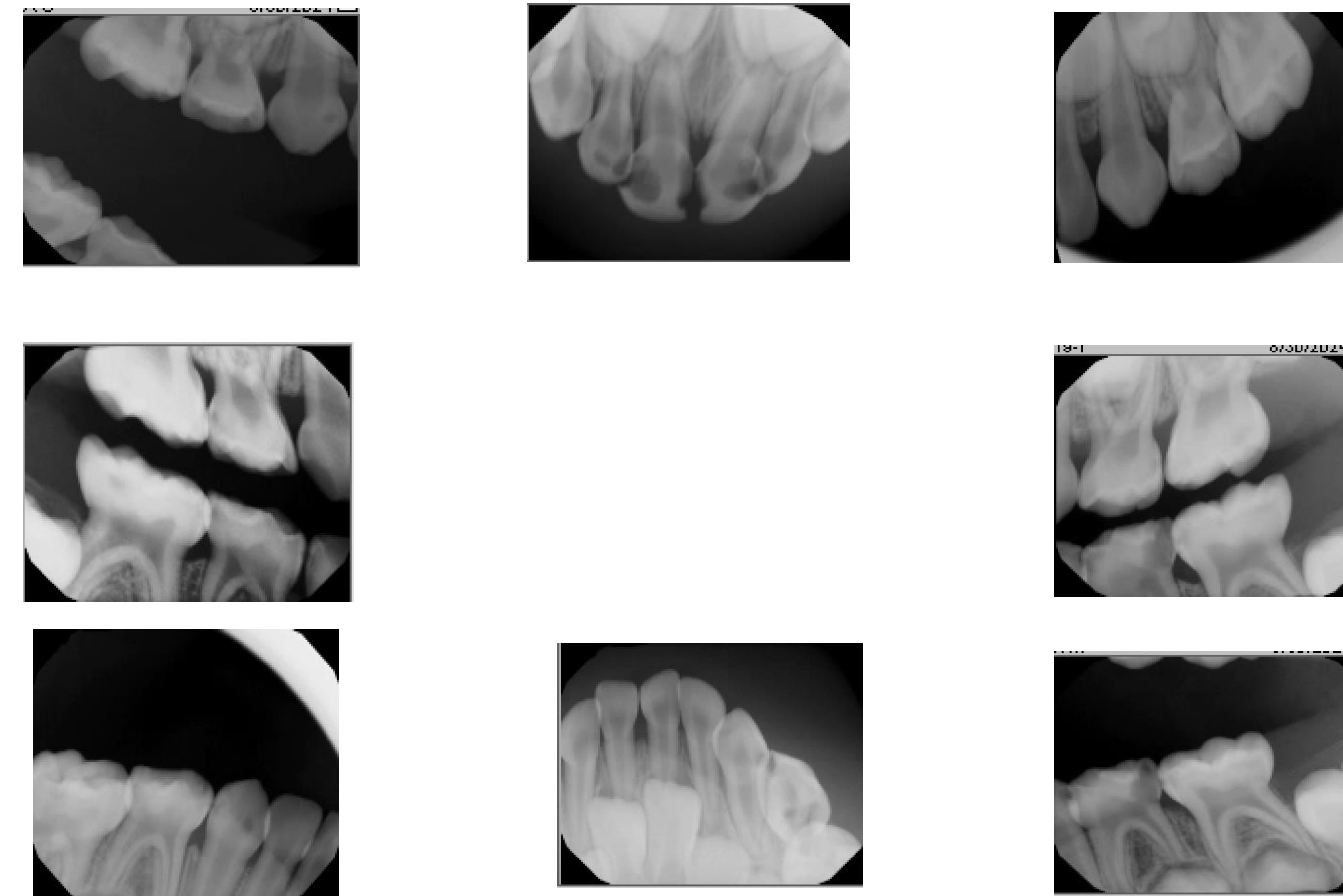
A 5-year-old female with a history of atrial septal defect and pulmonary valve stenosis underwent dental treatment in the operating room under general anesthesia. Dental procedures performed included stainless steel crowns on teeth A, B, I, J, K, S, and T; routine extractions of teeth D, E, F, G, and L; placement of a band and loop space maintainer for tooth L; and dental prophylaxis with fluoride varnish.

Initial hemostasis at the extraction sites were achieved with gauze pressure. However, during preparation for extubation, persistent oozing from extraction sites were noted. Multiple local hemostatic measures were attempted—including sutures, 2% lidocaine with 1:100,000 epinephrine, GELFOAM®, Afrin®, FloSeal®, and silver nitrate—but bleeding continued. Due to concern for potential blood aspiration, the anesthesia team deferred extubating, and the patient was admitted to the Pediatric Intensive Care Unit (PICU) for monitoring and further management.

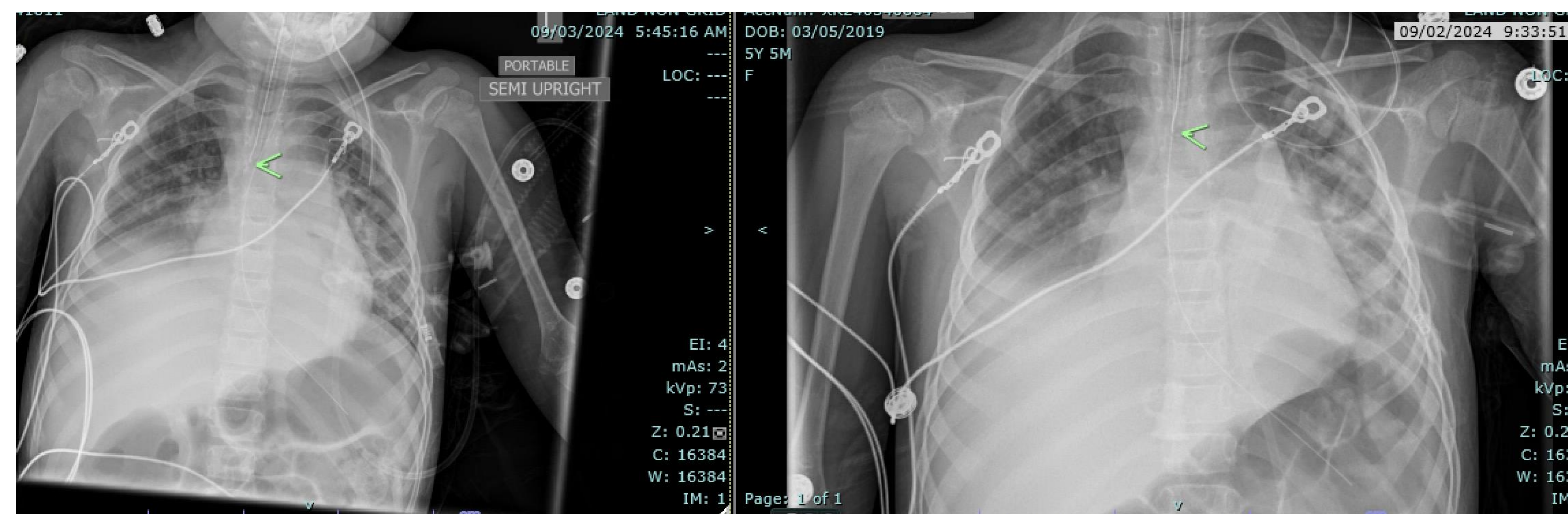
During the PICU stay, bleeding was controlled after administration of vitamin K, which was prompted by elevated INR and PTT values. On Day 1 post-admission, the patient developed fever and respiratory distress. Chest radiography revealed pleural effusion, and aspiration pneumonia was diagnosed and treated. The patient stabilized by Day 5 and was successfully extubated.

A full hematologic workup was unremarkable. No additional hematology consultations were deemed necessary prior to discharge. The patient was discharged after a 9-day hospital stay, and the care team—including her cardiologist—was informed of the admission and treatment course.

## DENTAL RADIOGRAPHS



## CHEST RADIOGRAPHS



Radiology report noted enlarging moderate-sized right pleural effusion. Left image taken 1 day after the right image.

## DISCUSSION

This case highlights the importance of recognizing and managing postoperative bleeding complications, even in pediatric patients without a known bleeding disorder. While oral bleeding is typically self-limiting, persistent hemorrhage can lead to serious complications such as aspiration pneumonia, as seen in this case. This case also underscores the need for thorough preoperative assessment, close postoperative monitoring, and rapid intervention when bleeding persists<sup>1</sup>. Although rare, bleeding complications after dental procedures under general anesthesia should be considered a potential risk in children, even in the absence of hematologic abnormalities<sup>2</sup>.

## CONCLUSION

Prompt recognition, interdisciplinary collaboration, and early intervention were key to successful management. Clinicians should maintain a high index of suspicion for post-operative bleeding and respiratory compromise in young children undergoing dental procedures under general anesthesia.

## REFERENCES

1. Acharya S, et al. Post-extraction bleeding in children: Causes and management. *Int J Clin Pediatric Dent.* 2017;10(2):206–210.
2. American Academy of Pediatric Dentistry. *Guideline on Behavior Guidance for the Pediatric Dental Patient.* *Pediatric Dent.* 2021;43(6):292–310.

