



# Idiopathic Root Resorption In Primary Teeth of Rhabdomyosarcoma Patient

Dr. Gabriela A. Vázquez González, Dr. Cheryl Paulo Malavé, Dr. Melba Esquilín Cruz, Dr. Andrea Rodríguez Rolón  
University of Puerto Rico, Medical Sciences Campus-School of Dental Medicine



## INTRODUCTION

Rhabdomyosarcoma is the most common soft tissue sarcoma in children accounting for 4.5% of all childhood cancer cases (Medscape. 2022). Idiopathic root resorption is defined as the loss of tooth root due to an unknown cause. While the cause is unknown, some potential factors may be genetics, systemic conditions and/or syndromes, medications, inflammatory conditions or trauma. It does not exhibit symptoms and is typically detected by routine radiographs. In severe cases, it can present with mobility and pain.

Root resorption has been observed in patients with this type of cancer after their oncologic treatment. There is limited evidence about the possibility that rhabdomyosarcoma is responsible for dental root resorption (Kawai et al., 2000).

## CASE REPORT

Case of a 5-year-old female patient with no previous medical history diagnosed with rhabdomyosarcoma of the right eye. Our on-call team evaluated her while she was admitted to the pediatric ward to provide dental clearance to place Medport and start chemotherapy as soon as possible. Upon clinical and radiographic evaluation, the patient presented with multiple dental caries and idiopathic root resorption in her mandibular first primary molars (L and S). The patient was asymptomatic, and there was no tooth mobility.

## CLINICAL AND RADIOGRAPHIC EXAMINATION



Fig. 1: Right Lateral View



Fig. 2: Frontal View



Fig. 3: Left Lateral View



Fig. 4: Maxillary Occlusal View



Fig. 5: Mandibular Occlusal View



Fig. 6: Panoramic Radiograph

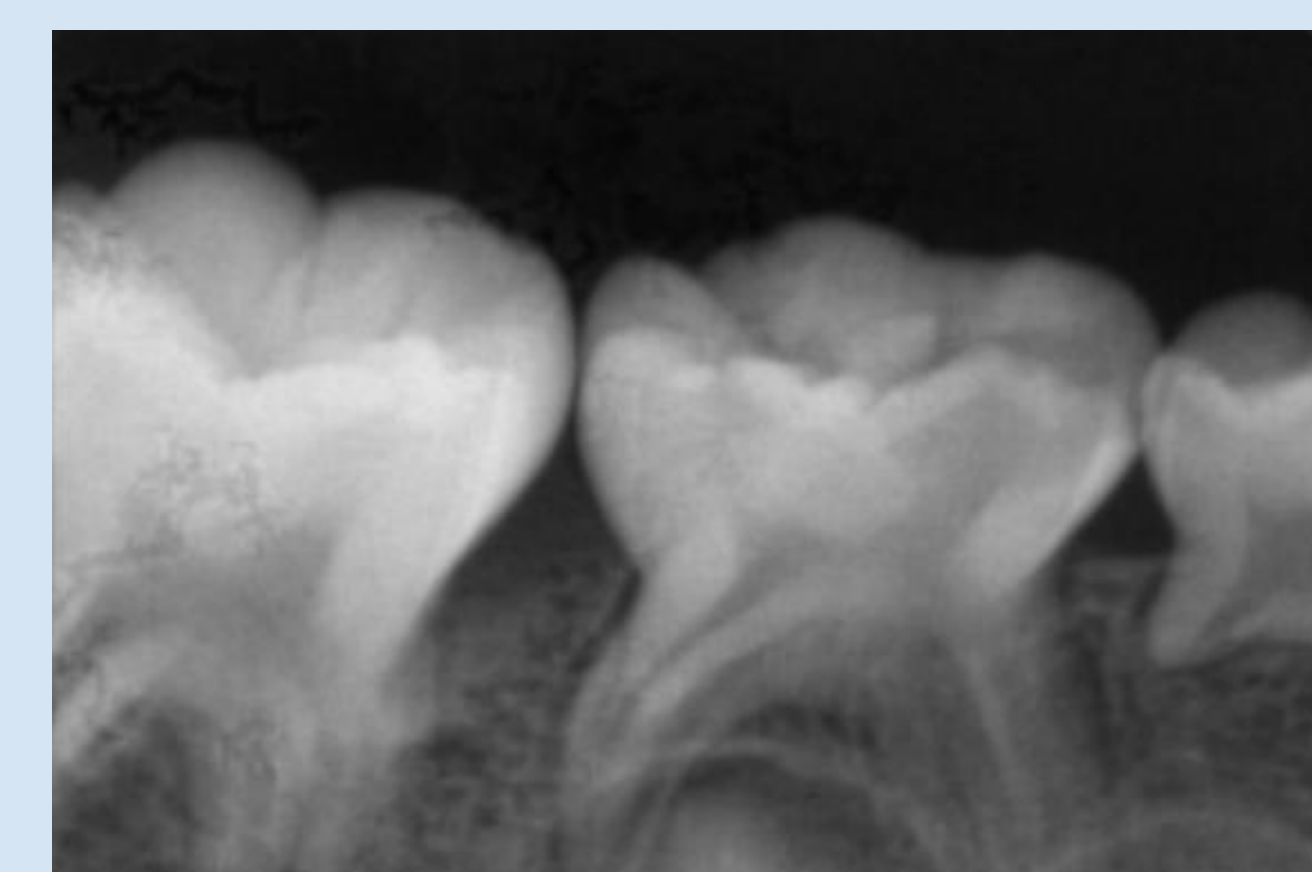


Fig. 7: Right Periapical Radiograph

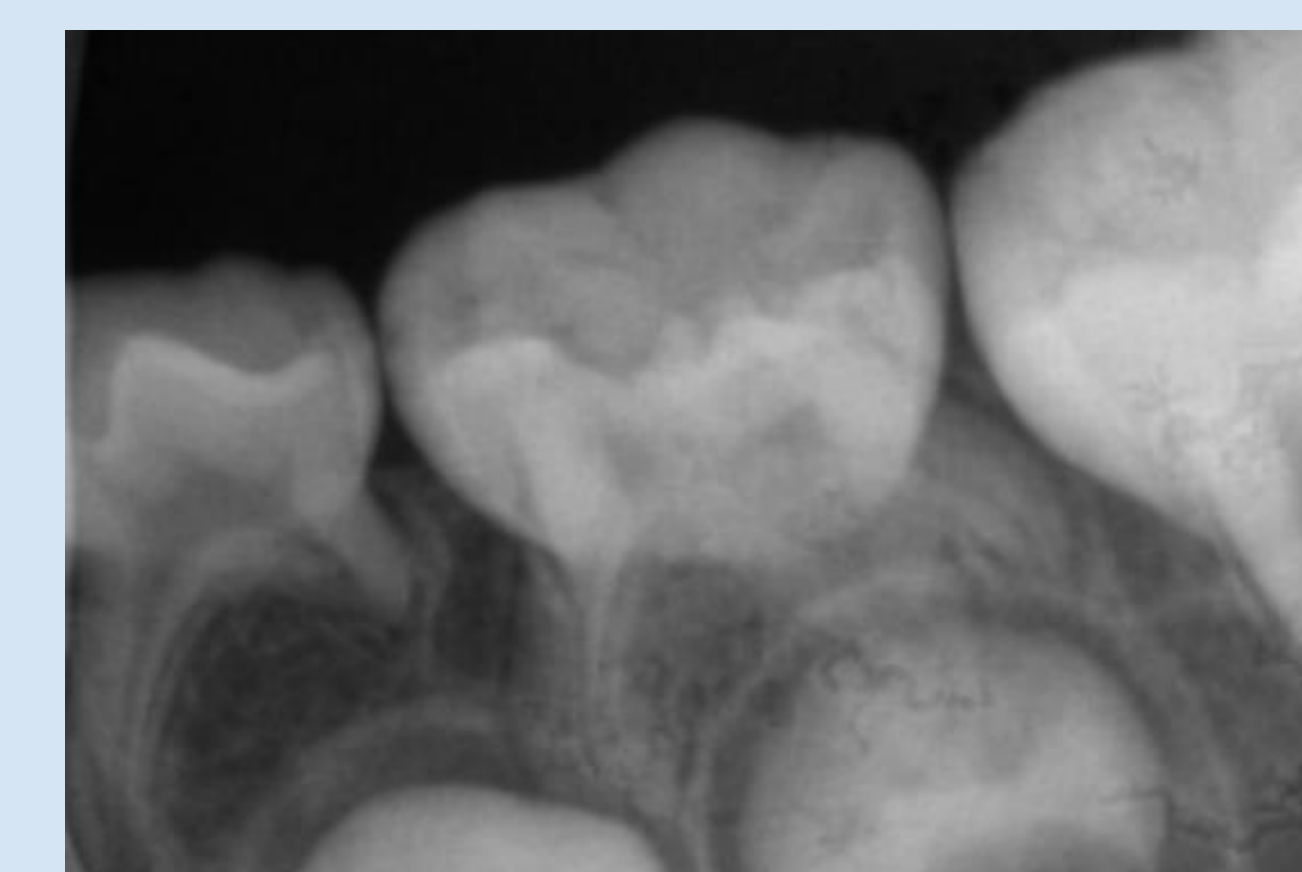
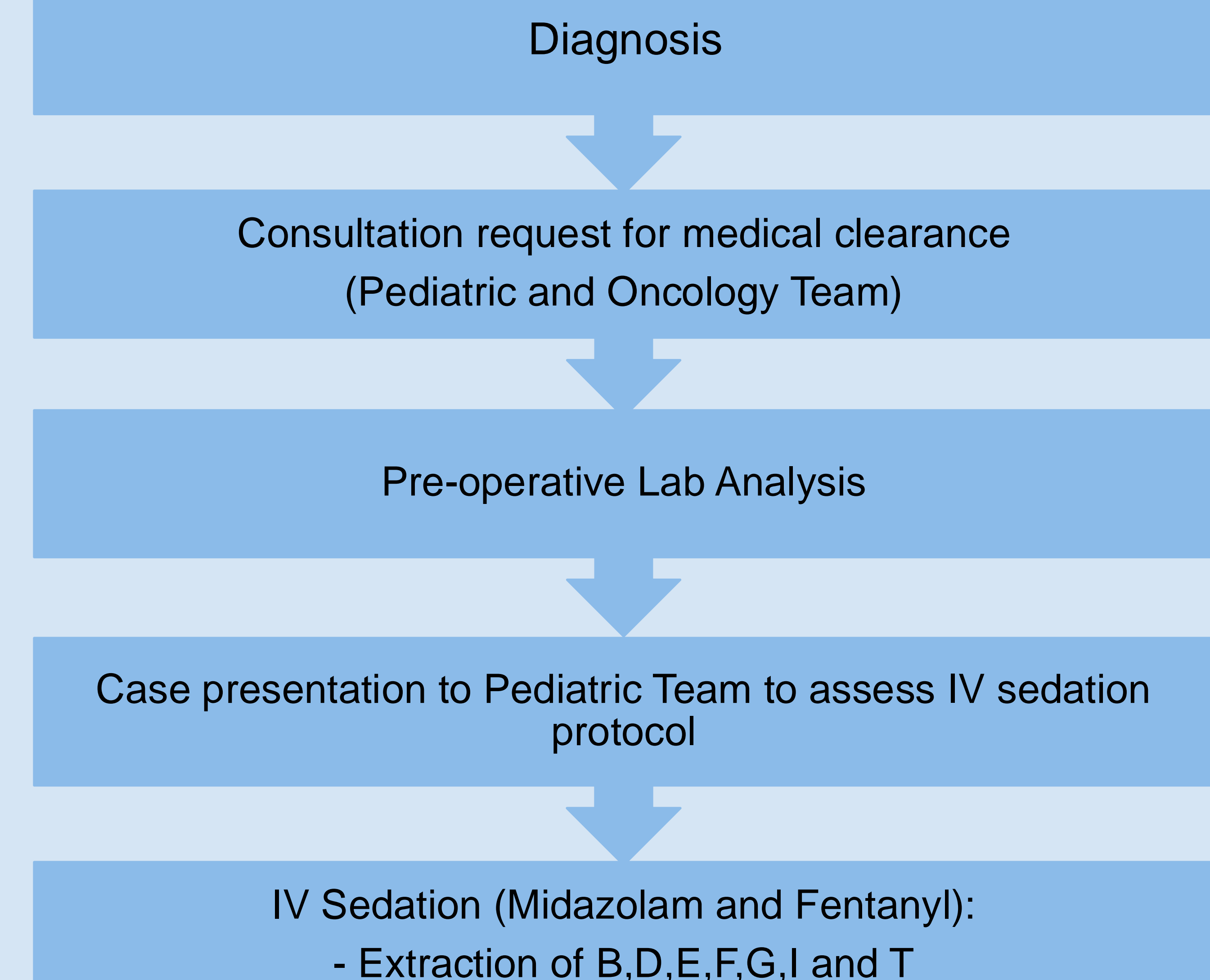


Fig. 8: Left Periapical Radiograph

## MANAGEMENT



## CONCLUSION

A multidisciplinary approach is crucial for patients of this type. Idiopathic root resorption is often discovered incidentally during routine radiographic examination. The extractions of teeth L and S were not performed because patient was asymptomatic and there was no clinical indication for it. This case report highlights the possibility that rhabdomyosarcoma may cause idiopathic root resorption, underscoring the importance of this finding as it may serve as a red flag indicating that the patient might be suffering from a medical condition.

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