

BACKGROUND

- Pre Eruptive Intracoronary Resorption (PEIR) lesions are a relatively uncharted area in the field of pediatric dentistry, with limited research and understanding of its underlying causes, diagnostic modalities, and treatment strategies.
- PEIR lesions are abnormal, well circumscribed, radiolucent areas occurring in the coronal dentinal tissue in close proximity to the dentinal enamel junction of unerupted teeth.
- Majority of studies suggest that pre eruptive lesions are resorptive in nature due to the presence of multinucleate cells, osteoclasts, and other chronic inflammatory cells.

OBJECTIVES

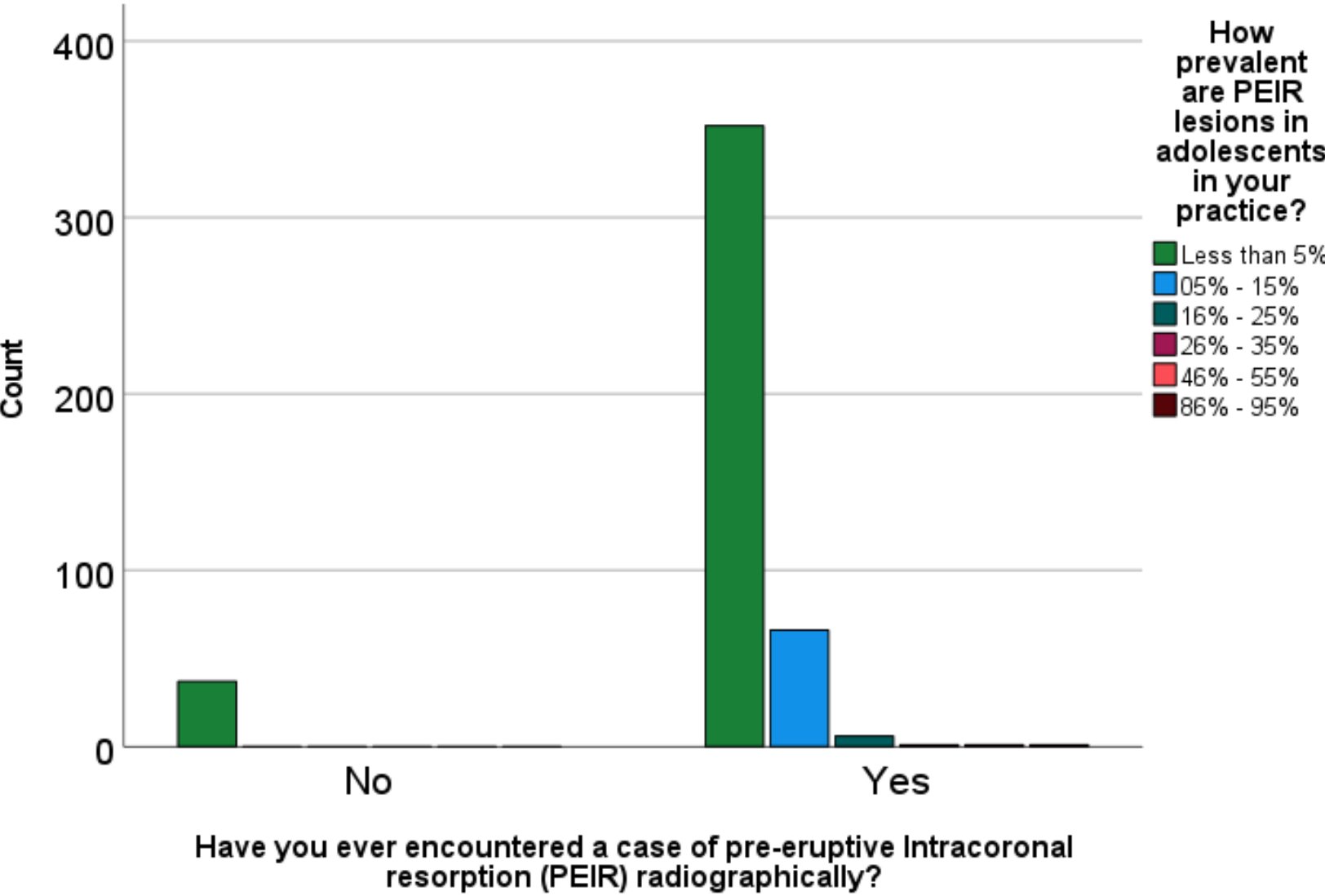
- Objective is to determine whether treatment should be performed on PEIR lesions, or if they should be monitored if asymptomatic.
- The goal of this study is to assess the prevalence of pre eruptive intracoronary resorption (PEIR) in the pediatric population, and different treatment modalities utilized by pediatric dentists.

METHODS

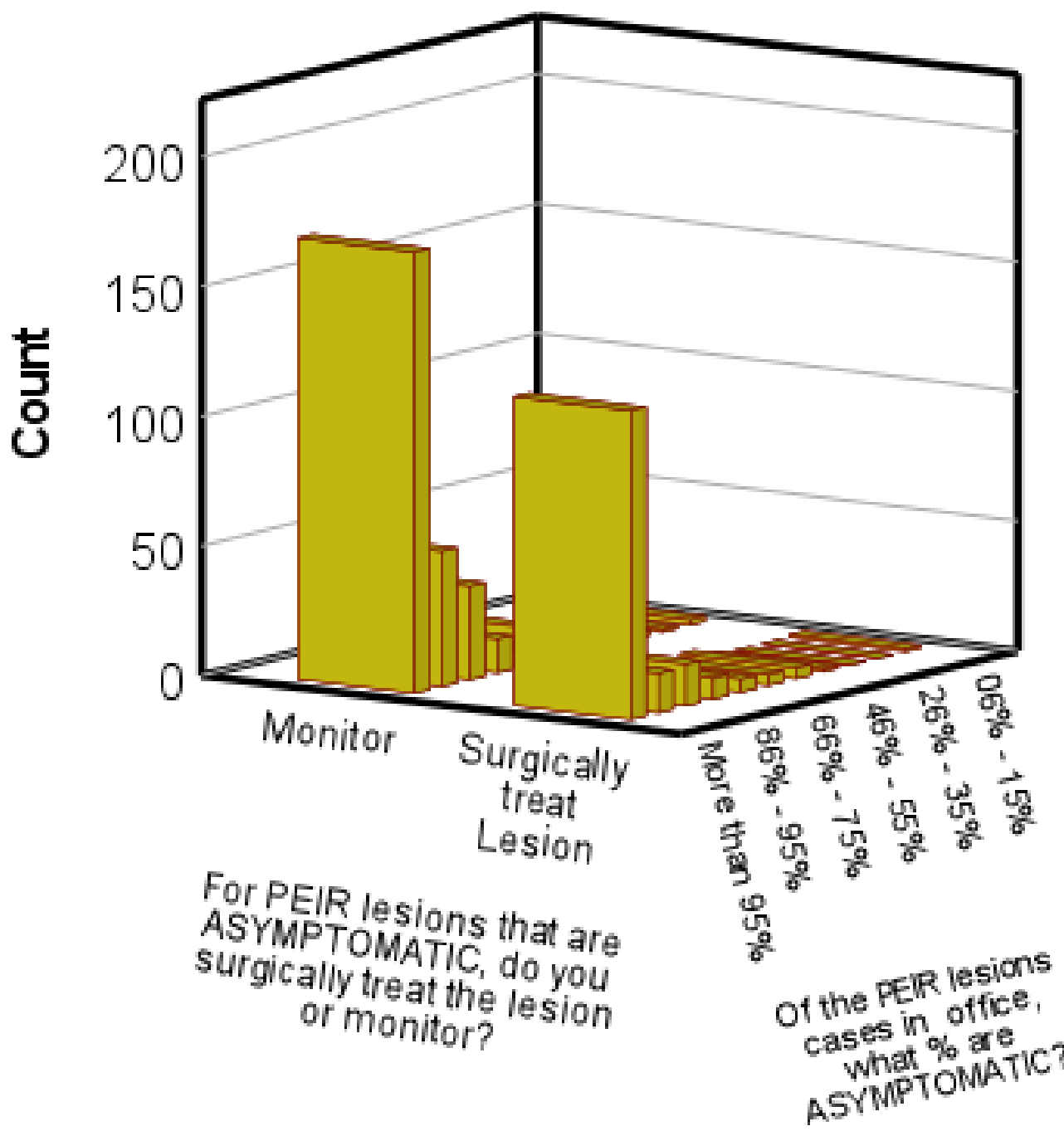
- Online Survey sent out to 6,300 Pediatric Dentists.
- Pediatric Dentists were asked several multiple choice questions related to their experience with PEIR lesions.
- Questions determined whether or not they have seen PEIR lesions on a radiograph, and whether they opt to treat lesions or to monitor them.
- Statistical analyses was completed using Pearson Chi-Square, Likelihood Ratio, and Linear-By-Linear Association Test out of the 464 survey responses.

RESULTS

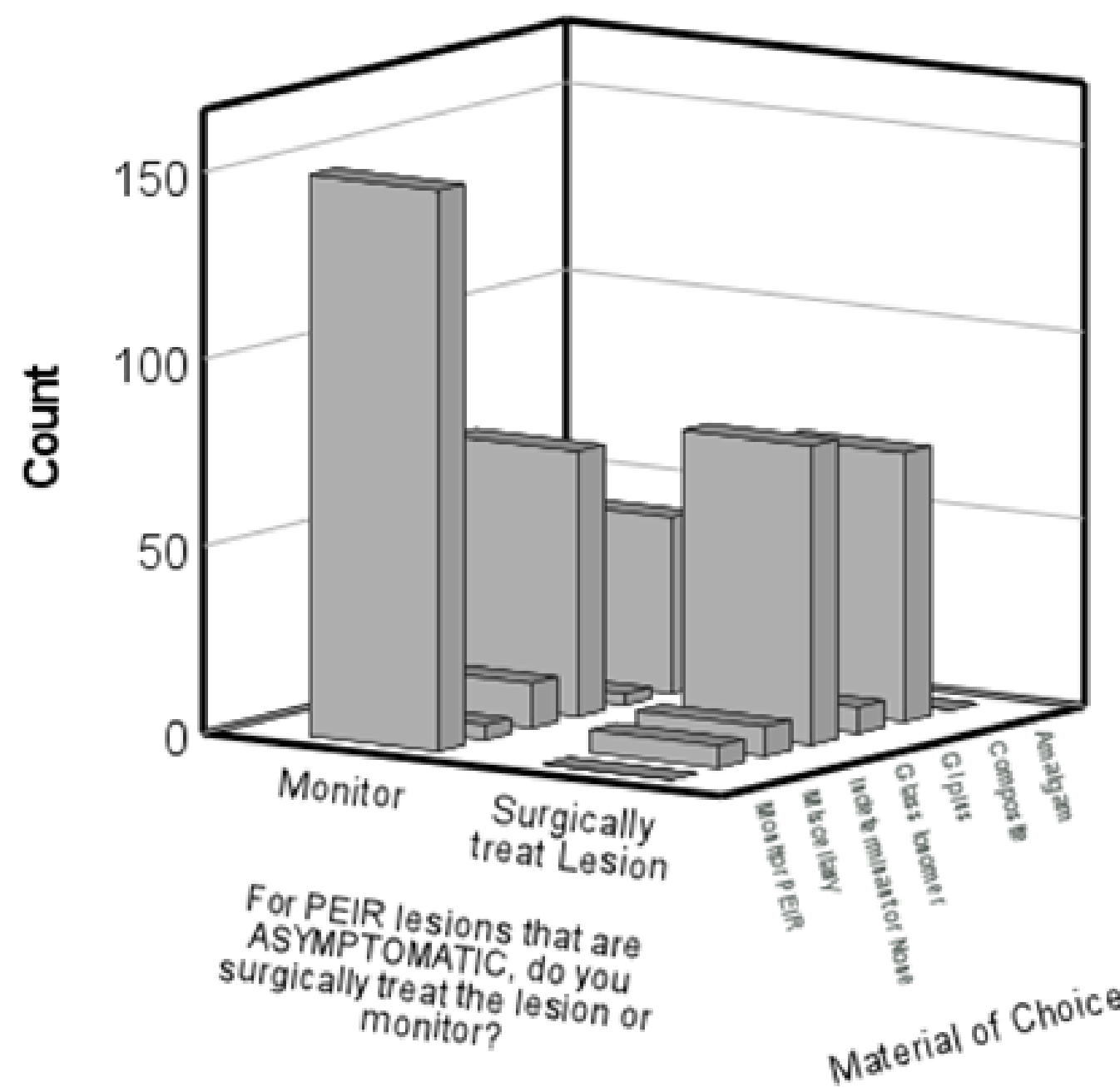
- From 6,300 surveys sent out, **464** responses were received.
- **427** Pediatric dentists state that they have encountered a case of PEIR radiographically, **37** responded that they have not. Dentists who state they have not were excluded from some statistical analysis.



- Dentists who state they have seen a case of PEIR, **389** (84%) state that it is seen in **less than 5%** of patients. **66** (14%) state that it is seen in **5%-15%** of patients. **455** (98%) stating an occurrence **less than 15%**.



% Materials of Choice



- Out of **314** dentists who opt to treat PEIR lesions, **280** (**89%**) chose to restore the tooth with either Composite or Glass Ionomer.

RESULTS CONTINUED

- Three tests (Pearson Chi-Square, Likelihood Ratio, and Linear-By-Linear Association) were completed.
- Linear-By-Linear test was statistically significant assuming a P-Value of <0.055.
- Pearson Chi-Square and Likelihood Ratio test showed no statistical significance.
- A decision whether to monitor or surgically treat a PEIR lesion should be made based on clinical and radiographic presentation.
- One limitation of the survey was study size of recipients. A larger response rate is need.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12.225 ^a	6	.057
Likelihood Ratio	11.256	6	.081
Linear-by-Linear Association	3.744	1	.053
McNemar-Bowker Test			^b
N of Valid Cases	464		

a. 5 cells (35.7%) have expected count less than 5. The minimum expected count is 1.06.
b. Computed only for a P x P table, where P must be greater than 1.

DISCUSSION

- Although results in some statistical analysis tests may be statistically insignificant, clinical significance may still be relevant.
- The majority of Pediatric Dentists chose to monitor PEIR lesions if they were asymptomatic.
- Final decisions on whether or not to monitor PEIR lesions or to treat them surgically should be made by the Pediatric dentist providing treatment.
- More input is needed on whether or not PEIR lesions should be monitored or treated surgically, and their long term prognosis.

REFERENCES

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