



## Grounding Caption

This localization caption provides multi-dimensional spatial analysis of anatomical structures and pathological findings for this panoramic dental X-ray image, including:

Teeth visibility with center points (total: 23):

```
[  
{'point_2d': [556, 510], 'tooth_id': '47', 'score': 0.93},  
{'point_2d': [627, 523], 'tooth_id': '46', 'score': 0.93},  
{'point_2d': [935, 528], 'tooth_id': '36', 'score': 0.92},  
{'point_2d': [506, 336], 'tooth_id': '17', 'score': 0.92},  
{'point_2d': [577, 333], 'tooth_id': '16', 'score': 0.91},  
{'point_2d': [623, 328], 'tooth_id': '15', 'score': 0.87},  
{'point_2d': [704, 338], 'tooth_id': '13', 'score': 0.87},  
{'point_2d': [995, 516], 'tooth_id': '37', 'score': 0.85},  
{'point_2d': [864, 346], 'tooth_id': '23', 'score': 0.83},  
{'point_2d': [934, 350], 'tooth_id': '25', 'score': 0.82},  
{'point_2d': [689, 524], 'tooth_id': '45', 'score': 0.82},  
{'point_2d': [800, 340], 'tooth_id': '21', 'score': 0.81},  
{'point_2d': [1032, 362], 'tooth_id': '27', 'score': 0.79},  
{'point_2d': [741, 344], 'tooth_id': '12', 'score': 0.79},  
{'point_2d': [766, 338], 'tooth_id': '11', 'score': 0.79},  
{'point_2d': [664, 337], 'tooth_id': '14', 'score': 0.78},  
{'point_2d': [900, 345], 'tooth_id': '24', 'score': 0.77},  
{'point_2d': [980, 349], 'tooth_id': '26', 'score': 0.76},  
{'point_2d': [837, 514], 'tooth_id': '33', 'score': 0.75},  
{'point_2d': [887, 527], 'tooth_id': '35', 'score': 0.73},  
{'point_2d': [837, 515], 'tooth_id': '34', 'score': 0.71},  
{'point_2d': [722, 518], 'tooth_id': '43', 'score': 0.67},  
{'point_2d': [722, 519], 'tooth_id': '42', 'score': 0.61}  
]
```

Wisdom teeth detection (total: 0):

```
[  
]
```

Dental Pathological Findings (total: 3):

```
[  
{'box_2d': [826, 281, 859, 369], 'tooth_id': 'unknown', 'label': 'root-stump', 'score': 0.9, 'near_tooth': '23'},  
{'box_2d': [515, 348, 536, 376], 'tooth_id': 'unknown', 'label': 'caries', 'score': 0.55, 'near_tooth': '17'},  
{'box_2d': [618, 346, 642, 381], 'tooth_id': 'unknown', 'label': 'caries', 'score': 0.46, 'near_tooth': '15'}  
]
```

Historical Treatments (total: 0):

```
[  
]
```

## Medical Report

### Oral Panoramic Radiographic Examination Report

## **\*\*1. Teeth-Specific Observations\*\***

### **#### General Condition**

- A total of **23 teeth** are visualized, with no detectable wisdom teeth present.
- Visualized teeth include: #11, #12, #13, #14, #15, #16, #17, #21, #23, #24, #25, #26, #27, #33, #34, #35, #36, #37, #42, #43, #45, #46, #47.

### **#### Pathological Findings**

- **Root stump noted near tooth #23**, indicating prior extraction or resorption.
- **Suspected carious lesion near tooth #17**, with limited radiographic clarity suggesting early decay or developmental anomaly.
- **Suspected carious involvement near tooth #15**, areas of concern noted for potential demineralization.

### **#### Historical Interventions**

- No restorations, crowns, root canal treatments, or implants identified in the visualized field.
- 

## **\*\*2. Clinical Summary & Recommendations\*\***

### **#### Priority Concerns**

- **Root stump near #23** requires evaluation for complete removal or monitoring for infection.
- **Suspected caries near #17 and #15** warrant early intervention to prevent progression.

### **#### Preventive Measures**

- Reinforce oral hygiene protocols for interproximal areas of #17 and #15.
- Monitor radiographic areas of concern during routine check-ups for changes in density.

### **#### Follow-up Protocol**

- Schedule **6-month recall** for reassessment of suspected caries and root stump.
  - Refer to general dentist for **detailed evaluation of #17 and #15** to confirm caries and plan restorative care.
  - Consider surgical consultation for **residual root fragment near #23** if clinically symptomatic.
- 

\*Generated per standardized radiographic interpretation guidelines.\*