



## 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: 27):

```
[
{'point_2d': [1098, 620], 'tooth_id': '36', 'score': 0.95},
{'point_2d': [613, 620], 'tooth_id': '46', 'score': 0.95},
{'point_2d': [515, 626], 'tooth_id': '47', 'score': 0.95},
{'point_2d': [681, 635], 'tooth_id': '45', 'score': 0.94},
{'point_2d': [1271, 570], 'tooth_id': '38', 'score': 0.94},
{'point_2d': [737, 443], 'tooth_id': '13', 'score': 0.94},
{'point_2d': [1183, 429], 'tooth_id': '27', 'score': 0.93},
{'point_2d': [949, 650], 'tooth_id': '33', 'score': 0.92},
{'point_2d': [1191, 620], 'tooth_id': '37', 'score': 0.92},
{'point_2d': [433, 576], 'tooth_id': '48', 'score': 0.91},
{'point_2d': [1031, 638], 'tooth_id': '35', 'score': 0.91},
{'point_2d': [508, 437], 'tooth_id': '17', 'score': 0.91},
{'point_2d': [925, 450], 'tooth_id': '22', 'score': 0.91},
{'point_2d': [775, 647], 'tooth_id': '43', 'score': 0.91},
{'point_2d': [728, 642], 'tooth_id': '44', 'score': 0.9},
{'point_2d': [993, 646], 'tooth_id': '34', 'score': 0.89},
{'point_2d': [589, 439], 'tooth_id': '16', 'score': 0.89},
{'point_2d': [818, 638], 'tooth_id': '42', 'score': 0.89},
{'point_2d': [789, 445], 'tooth_id': '12', 'score': 0.87},
{'point_2d': [1017, 447], 'tooth_id': '24', 'score': 0.87},
{'point_2d': [977, 437], 'tooth_id': '23', 'score': 0.86},
{'point_2d': [834, 451], 'tooth_id': '11', 'score': 0.84},
{'point_2d': [847, 637], 'tooth_id': '41', 'score': 0.84},
{'point_2d': [880, 451], 'tooth_id': '21', 'score': 0.84},
{'point_2d': [874, 637], 'tooth_id': '31', 'score': 0.83},
{'point_2d': [1063, 447], 'tooth_id': '25', 'score': 0.81},
{'point_2d': [901, 650], 'tooth_id': '32', 'score': 0.78}
]
```

Wisdom teeth detection (total: 2):

```
[
{'box_2d': [1207, 488, 1336, 651], 'tooth_id': '38', 'is_impacted': false, 'score': 0.94},
{'box_2d': [371, 491, 496, 660], 'tooth_id': '48', 'is_impacted': false, 'score': 0.91}
]
```

Dental Pathological Findings (total: 2):

```
[
{'box_2d': [1042, 478, 1062, 513], 'tooth_id': 'unknown', 'label': 'caries', 'score': 0.67, 'near_tooth': '25'},
{'box_2d': [537, 651, 611, 719], 'tooth_id': 'unknown', 'label': 'periapical radiolucency', 'score': 0.47, 'near_tooth': '46'}
]
```

Historical Treatments (total: 0):

```
[
]
```

## Medical Report

## ORAL PANORAMIC X-RAY EXAMINATION REPORT

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### \*\*Teeth-Specific Observations\*\*

#### #### General Condition

A total of 27 teeth are visualized, including both upper and lower wisdom teeth (#38 and #48). The wisdom teeth are fully erupted and not impacted. No evidence of missing or supernumerary teeth is noted.

#### #### Pathological Findings

- **Caries:** Areas of concern are noted suspicious for caries near tooth #25 (left second molar).
- **Periapical Radiolucency:** A suspicious radiolucent area is observed near tooth #46 (left first molar), potentially indicating periapical pathology.

#### #### Historical Interventions

No restorations, crowns, root canal treatments, or implants are observed in the examined teeth.

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### \*\*Clinical Summary & Recommendations\*\*

#### #### Priority Concerns

1. **Caries Risk:** The suspicious caries near #25 requires immediate evaluation to confirm presence and extent.
2. **Periapical Radiolucency:** The radiolucent lesion near #46 warrants investigation for possible apical periodontitis or other periapical pathology.

#### #### Preventive Measures

- Reinforce oral hygiene practices, emphasizing interdental cleaning for #25 and #46.
- Monitor caries-susceptible areas during routine check-ups.

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

- Schedule a 6-month recall for reassessment of findings.
  - Refer to an endodontist for advanced imaging (e.g., CBCT) and treatment planning for the periapical radiolucency near #46.
  - Recommend a dental cleaning session to address potential biofilm accumulation in posterior regions.
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\*Generated by AI-powered oral radiology analysis.\*