Clinical Significance of Temporomandibular Joint Abnormalities

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PURPOSE

• To determine which TMJ MRI abnormality that are clinically significant
MATERIAL & METHODS

- Bilateral TMJ MR images
- 58 patients with pain and dysfunction
- 62 asymptomatic volunteers
Normal Disk Position
Disk Displacement
RESULTS

<table>
<thead>
<tr>
<th>Abnormality</th>
<th>Patients n=62</th>
<th>Volunteers n=58</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disk Displacement</td>
<td>78%</td>
<td>35%</td>
</tr>
<tr>
<td>Bilateral Disk displacement</td>
<td>47%</td>
<td>13%</td>
</tr>
</tbody>
</table>
Partial Anterior Disk Displacement

Lateral  Central  Medial
Complete Anterior Disk Displacement

Lateral  Central  Medial
Joint Function on Open Mouth

Without Reduction

With Reduction
Joint Effusion
Bone Marrow Abnormality
## RESULTS

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<td>13%</td>
</tr>
<tr>
<td>Complete Disk Displacement</td>
<td>40%</td>
<td>2%</td>
</tr>
<tr>
<td>Non Reduction of a Displaced Disk</td>
<td>76%</td>
<td>2%</td>
</tr>
<tr>
<td>Bone Marrow Abnormalities</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>Large Joint Effusion</td>
<td>13%</td>
<td>0%</td>
</tr>
</tbody>
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CONCLUSION

Significant abnormalities:
- Bone marrow abnormalities
- Large joint effusion
- Complete types of disk displacement

Less significant abnormalities:
- Partial types of disk displacement
- Disk displacement with reduction