Classification of prosthodontic procedures based on the level of invasiveness

Surya R*
Jayakar Shetty**
Chandrasekharan Nair***
Lakshmikanth K****
Srividya S*****

Abstract

Prosthodontic treatment procedures range from non-invasive procedures such as impression making to highly invasive procedures like full arch implant treatment. Classification of dental treatment procedures based on the invasiveness is needed to assess the risk of complications in patients with systemic disease. This article classifies the prosthodontic procedures according to the risk involved in the treatment. (TPDI July 2012; 3 : 49-50)

Key words: classification, dental treatment, prosthodontic treatment

Prosthodontic treatment procedures range from non-invasive procedures such as impression making to highly invasive procedures like full arch implant treatment. Classification of dental treatment procedures based on the invasiveness is needed to assess the risk of complications in patients with systemic disease. The initial and ongoing assessment of the patient’s medical risk in dental practice has several purposes:

- to minimize the risk of adverse events in the dental office
- to identify patients who need further medical assessment and management
- to identify patients for whom specific perioperative therapies or treatment modifications that will minimize the risk, including postponing elective treatment.
- to identify appropriate anesthetic technique, intraprocedure monitoring, and postprocedure management.
- to discuss treatment procedures with patients, outlining risks and benefits, in order to obtain informed consent and to determine the need for additional anxiolysis.

Levels of dental treatment as related to dental implant treatment

There are four levels of treatment which may vary from noninvasive procedures with little or no risk of gingival bleeding, to those which are most complicated and invasive. (Table I)

Levels as related to all prosthodontic treatment procedures based on the invasiveness

Prosthodontic treatment procedures also can be classified into four levels (Table II). The systemic risk factors based on the level of treatment done and the modifications which has to be done is given in Table III

Stress reduction considerations

- Anxiolytic premedication: Benzodiazepine at bedtime night before appointment and 1 hour prior to appointment
- Appointment scheduling: early in the day
- Minimize waiting time: in waiting room and dental chair
- Preoperative and postoperative vital signs: blood pressure, heart rate and rhythm, respiratory rate, pain score
- Sedation during treatment: iatrosedation (music and video distraction, hypnosis), nitrous oxide/oxygen analgesia or pharmacosedative procedures including oral, inhalational, intramuscular, intranasal or intravenous (minimal or moderate) sedation, or general anesthesia
Treatment duration: short appointments

An understanding of the patient’s underlying medical condition allows the dental health provider to recommend modification before, during, or after the dental procedures in order to safely provide dental care.

Summary:

This article provides a classification for all the treatment procedures done in prosthodontics. The classification divides the treatment into four levels based on the invasiveness. This helps in assessing the risk while treating patients with systemic disorders in order to reduce the stress, anxiety and further complications. Stress reduction should be a main concern while treating patients with systemic disorders. This ensures safety to the patient while undergoing any kind of prosthodontic treatment.

<table>
<thead>
<tr>
<th>Patient category</th>
<th>Risk</th>
<th>Level I</th>
<th>Level II</th>
<th>Level III</th>
<th>Level IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal healthy patient without systemic disease</td>
<td>Normal</td>
<td>Treatment can be done</td>
<td>Sedation Stress reduction protocol</td>
<td>Intravenous sedation</td>
<td>Stress reduction protocol</td>
</tr>
<tr>
<td>Patient with mild to moderate systemic disease</td>
<td>Mild</td>
<td>Treatment can be done</td>
<td>Sedation Stress reduction protocol</td>
<td>Intravenous sedation</td>
<td>Stress reduction protocol</td>
</tr>
<tr>
<td>Patient with severe systemic disease that limits activity but not incapacitated</td>
<td>Moderate</td>
<td>Treatment can be done</td>
<td>Intravenous sedation Stress reduction protocol</td>
<td>Hospitalization</td>
<td>Hospitalization</td>
</tr>
<tr>
<td>Patient with severe systemic disease which is incapacitating and a constant threat to life</td>
<td>Severe</td>
<td>Treatment can be done</td>
<td>Postpone all elective procedures</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

References: