Adrenal Insufficiency Guidelines

Questions to Ask/ Necessary Information

- Are you taking corticosteroids? If so, why/what dose and for how long?
- Reason for adrenal suppression? Primary vs. secondary.
- Do you have any weakness, fatigue, abdominal pain, or hyperpigmentation of the skin? Or noticed any hyperpigmentation within your oral cavity?
- Have you noticed any weight loss, salt craving, dehydration or profuse sweating?
- Obtain medical consultation if condition is poorly controlled (e.g. acute infection), if clinical signs and symptoms point to an undiagnosed problem, or if diagnosis is uncertain.

Risk for Medical Emergency

- Acute adrenal crisis is a MEDICAL EMERGENCY

Pertinent Laboratory Information

- CBC w/ differential for patients on long term high dose corticosteroids

Management For Dental Treatment

- **Preoperative Management**
  1) Use anxiety/stress reduction techniques as needed to avoid an adrenal crisis
  2) Evaluation of corticosteroid use and determine need for supplementation:

<table>
<thead>
<tr>
<th>procedure</th>
<th>Target dose for primary adrenal insufficiency</th>
<th>Target dose for secondary adrenal insufficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine dental procedure</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Minor surgery</td>
<td>25-30mg hydrocortisone preoperatively</td>
<td>Daily therapeutic dose</td>
</tr>
<tr>
<td>Moderate Surgery</td>
<td>50-75mg hydrocortisone preoperatively</td>
<td>Daily therapeutic dose</td>
</tr>
</tbody>
</table>

5mg prednisone = 20mg hydrocortisone = 25mg cortisol.
3) For extractions, discontinue drugs that decrease corticosteroids with the consent of patient’s physician (e.g. ketoconazole)
4) Target dose of 30mg hydrocortisone (7.5mg prednisone) per day for minor oral and periodontal surgical procedures, administered prior to procedure
5) Monitor BP

• **Management During Treatment**
  1) Provide adequate operative anesthesia
  2) Routine use of epinephrine (1:100,000) is appropriate
  3) Monitor blood pressure throughout stressful and invasive procedures
  4) Consider using long-acting local anesthetics (e.g. Bupivacaine) at the end of the procedure to provide longer postoperative pain control

• **Postoperative Management**
  1) Provide good postoperative pain control to avoid adrenal crisis
  2) If procedure involved more than moderate surgery continue to monitor blood pressure for at least 8 hours postoperatively
  3) Patients should be monitored for good fluid balance and adequate blood pressure during the first 24 hours
  4) Communicate with patient at the end of the appointment and within 4 hours postoperatively to determine whether features of weak pulse, hypotension, dyspnea, myalgias, arthralgia, ileus, and fever are present.

**Oral Manifestations**

• Primary Adrenal Insufficiency: Diffuse or focal brown macular pigmentation of the oral mucous membrane, pigmentation of sun-exposed skin often follows the appearance of oral pigmentation and is accompanied by lethargy
• Secondary Adrenal Insufficiency: prone to delayed healing and increased susceptibility to infection

**References**