Management of IRIS

June 2017

Table 2: Major and Minor Presentations of Immune Reconstitution Inflammatory Syndrome (IRIS)

<table>
<thead>
<tr>
<th>Underlying OI</th>
<th>IRIS Signs/Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Major Presentations</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Tuberculosis (TB)      | • Patients responding to TB treatment may have worsening of pulmonary symptoms, X-ray findings that suggest worsening of TB disease, enlarging lymph nodes causing airway obstruction, or meningeval symptoms.  
  • Enlarging tuberculoma or pericardial effusions have been described [Meintjes, et al. 2008].  
  • TB-IRIS can also result in hepatotoxicity, which may be difficult to distinguish from medication-induced toxicity [Lawn and Wood 2007].  
  • TB-IRIS may occur in patients with undiagnosed multidrug-resistant TB [Meintjes, et al. 2009]. |
| Mycobacterium avium complex (MAC) | • May present as pulmonary disease or systemic inflammation that is indistinguishable from active MAC.  
  • Atypical presentations, such as localized lymphadenitis or endobronchial mass lesions, may occur [Lawn, et al. 2005a]; osteomyelitis is an atypical late manifestation [Aberg, et al. 2002].  
  • Patients with MAC-IRIS may not be bacteremic and may have no known history of MAC diagnosis [Lawn, et al. 2005a]. |
| Cytomegalovirus (CMV) retinitis | • Presents as retinitis, vitritis, or uveitis (variable timing, with median time to immune reconstitution vitritis 20 weeks after ART initiation in one study) [Karavellas, et al. 1999]:  
  − Retinitis is inflammation that is usually at the site of previous CMV retinitis lesions.  
  − Uveitis and vitritis are the presence of inflammatory cells in the eye as a result of IRIS and may help to distinguish IRIS from active CMV retinitis [Karavellas, et al. 1999].  
  • CMV-IRIS in the eye can cause rapid and permanent vision loss. |
| Progressive multifocal leukoencephalopathy (PML) | • PML lesions may be unmasked or worsen and could appear as new or worsening focal neurologic deficits or lesions on MRI [Safdar, et al. 2002; Gray, et al. 2005; Tan, et al. 2009]. |
### Table 2: Major and Minor Presentations of Immune Reconstitution Inflammatory Syndrome (IRIS)

<table>
<thead>
<tr>
<th>Underlying OI</th>
<th>IRIS Signs/Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaposi’s sarcoma (KS)</td>
<td>• Presents as worsening of KS.</td>
</tr>
<tr>
<td></td>
<td>• Cutaneous lesions are the most common presentation; other signs include lymphedema and oral, gastric, lung, genital, or conjunctival lesions [Leidner and Aboulafia 2005; Meintjes, et al. 2008].</td>
</tr>
<tr>
<td></td>
<td>• Fatal cases of KS-IRIS have been reported [Stover, et al. 2012; Odongo 2013].</td>
</tr>
<tr>
<td>Cerebral toxoplasmosis</td>
<td>• May present as a cerebral abscess (also known as toxoplasmosis encephalitis) or, rarely, diffuse encephalitis or chorioretinitis [Bowen, et al. 2016].</td>
</tr>
<tr>
<td>Autoimmune diseases</td>
<td>• Preexisting sarcoidosis may be exacerbated [Foulon, et al. 2004].</td>
</tr>
<tr>
<td></td>
<td>• Late presentations of Grave’s disease have been reported 8 to 33 months after ART initiation [Rasul, et al. 2011].</td>
</tr>
<tr>
<td>Minor Presentations</td>
<td></td>
</tr>
<tr>
<td>Herpes simplex virus (HSV) and varicella zoster virus (VZV)</td>
<td>• HSV and VZV can reactivate after initiation of ART, even in patients without previously diagnosed disease.</td>
</tr>
<tr>
<td></td>
<td>• Presentations are usually similar to non-IRIS disease; however, IRIS may worsen a patient’s symptoms.</td>
</tr>
<tr>
<td>Nonspecific dermatologic complications</td>
<td>• A number of dermatologic manifestations, such as folliculitis and oral and genital warts, may appear or worsen during immune reconstitution.</td>
</tr>
</tbody>
</table>

### References


___

Available at: hivguidelines.org/antiretroviral-therapy/iris/#tab_3

NEW YORK STATE DEPARTMENT OF HEALTH AIDS INSTITUTE CLINICAL GUIDELINES PROGRAM

WWW.HIVGUIDELINES.ORG


