Diagnostic Challenges in 4 Cases of HIV Lymphadenopathy

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Background

- Lymphadenopathy can occur throughout the course of HIV infection due to HIV infection itself, opportunistic disease, malignancy, or immune reconstitution.
- Fine needle aspiration (FNA) of the accessible node is usually sufficient for diagnosing infectious etiologies more common in patients with lower CD4 cell counts but neoplastic etiologies may require excisional biopsy.
- Cytologic morphology, genotype and phenotype are critical in determining diagnosis.
- It is not unusual for the clinician’s presumptive diagnosis to differ from the final diagnosis.

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Methods

- This was a retrospective review of 4 diagnostically challenging cases of lymphadenopathy in patients with HIV infection and CD4 cell counts greater than 350 who presented for routine outpatient care.
- Parameters included in the review are noted on Slide 3 to illustrate that length of HIV diagnosis, age and history of opportunistic infections, HIV viral suppression and normal laboratory work do not lead to a rapid diagnosis. Each complained of enlarged and/or tender inguinal, cervical or axillary lymph nodes ranging from 1.5 to 2.5 inches and were otherwise asymptomatic.
- HIV diagnosis ranged from 9-11 years; median age was 51.5 years. Nadir CD4 counts ranged from 11-277 and current CD4’s from 364-1241. All had normal CBC’s, platelets and lactic dehydrogenase levels.

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Discussion

These cases illustrate both benign and malignant etiologies. No infectious etiologies were identified. These patients need a detailed history, thorough physical exam and a complete diagnostic work-up that may include excisional biopsy and pertinent imaging including serial PET scans and focused sub-specialty consultations. Expert pathologic review can be required to establish the definitive diagnosis and presumptive diagnoses differed from the final diagnoses in all 4 of these patients. Asymptomatic lymphadenopathy cannot be ignored in patients with HIV.

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Results

<table>
<thead>
<tr>
<th>Patient</th>
<th>Presenting Symptoms</th>
<th>Physical Exam</th>
<th>HIV Diagnosis</th>
<th>CD4</th>
<th>Current CD4</th>
<th>Current HIV viral load (RNA copies)</th>
<th>History of opportunistic infections</th>
<th>NAART</th>
<th>Diagnostic Studies</th>
<th>Hemoglobin/Hematocrit/Hematocrit</th>
<th>Lymphocytes/mm² (μl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>75 yrs M</td>
<td>Smallest left axillary node X 20 days</td>
<td>1.25 × 10³ left axillary node 2.5×10⁳</td>
<td>HIV+</td>
<td>241</td>
<td>706</td>
<td>Large B cell lymphoma</td>
<td>-</td>
<td>White Blood Count</td>
<td>17/5/11/18/17</td>
<td>190</td>
</tr>
<tr>
<td>2</td>
<td>65 yrs M</td>
<td>Enlarged right lymph node X 13 months</td>
<td>1.25 × 10³ left axillary node 2.5×10⁳</td>
<td>HIV+</td>
<td>11</td>
<td>502</td>
<td>Cryptogenic reactivation</td>
<td>-</td>
<td>Neopterin</td>
<td>12/16/20/18/17</td>
<td>120</td>
</tr>
<tr>
<td>3</td>
<td>48 yrs M</td>
<td>HIV+</td>
<td>1.25 × 10³ left axillary node 2.5×10⁳</td>
<td>HIV+</td>
<td>201</td>
<td>281</td>
<td>Non-adequate</td>
<td>-</td>
<td>Hemoglobin/Hematocrit/Hematocrit</td>
<td>17/5/11/18/17</td>
<td>190</td>
</tr>
<tr>
<td>4</td>
<td>75 yrs M</td>
<td>HIV+</td>
<td>1.25 × 10³ left axillary node 2.5×10⁳</td>
<td>HIV+</td>
<td>77</td>
<td>1241</td>
<td>Non-adequate</td>
<td>-</td>
<td>Lymphocyte count</td>
<td>17/5/11/18/17</td>
<td>190</td>
</tr>
</tbody>
</table>

References