Kaposi Sarcoma manifestation in Women in an Urban Hospital in Atlanta, Georgia: a case-series

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Background

- Epidemic Kaposi Sarcoma (KS) is an AIDS-defining malignancy
- Georgia is in 5th in the nation for HIV diagnoses in 2015 and Grady Memorial Hospital (GMH) serves residents of two districts with the highest rates of HIV/AIDS in the state
- Georgia also had highest incidence of KS from 2009 to 2015
- AIDS-associated KS occurs more frequently in men who have sex with men (MSM) than in women
- However some studies have suggested that KS behaves more aggressively in women than in men

Methods

Individuals who were female at birth and had a biopsy-proven Kaposi Sarcoma from 1/1/2010 to 4/15/2018 were identified from the Pathology Cancer Registry. Their electronic medical records were reviewed and charts abstracted.

Results

Table I. Clinicopathological Features of Six HIV-Positive Women with Kaposi Sarcoma at Grady Memorial Hospital

| Patient | Age (y) | Race | Sex | HIV status | KS manifestation | CD4/CD8 ratio | ART started at KS diagnosis | Symptom presentation | Location | Diagnosis | Pathology
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<tbody>
<tr>
<td>1</td>
<td>35</td>
<td>Black</td>
<td>F</td>
<td>N</td>
<td>Pulmonary</td>
<td>5.38</td>
<td>No</td>
<td>Fever</td>
<td>Oral mucosa</td>
<td>KS dermal infiltration</td>
<td>Spindle cells</td>
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<tr>
<td>2</td>
<td>39</td>
<td>Black</td>
<td>F</td>
<td>N</td>
<td>Oral mucosa</td>
<td>3.81</td>
<td>Yes</td>
<td>Fever, diarrhea</td>
<td>Oral mucosa</td>
<td>KS oral mucosa</td>
<td>Other spindle cells</td>
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<tr>
<td>3</td>
<td>41</td>
<td>Black</td>
<td>F</td>
<td>N</td>
<td>Visceral</td>
<td>3.81</td>
<td>Yes</td>
<td>Oweek, vomiting, diarrhea</td>
<td>Visceral</td>
<td>KS visceral</td>
<td>Other spindle cells</td>
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<tr>
<td>4</td>
<td>47</td>
<td>Black</td>
<td>F</td>
<td>N</td>
<td>Abdominal</td>
<td>4.7</td>
<td>No</td>
<td>Oweek, pain</td>
<td>Abdominal</td>
<td>KS abdominal</td>
<td>Other spindle cells</td>
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<tr>
<td>5</td>
<td>40</td>
<td>Black</td>
<td>F</td>
<td>N</td>
<td>Oral mucosa</td>
<td>4.7</td>
<td>No</td>
<td>Oweek, pain</td>
<td>Oral mucosa</td>
<td>KS oral mucosa</td>
<td>Other spindle cells</td>
</tr>
<tr>
<td>6</td>
<td>41</td>
<td>Black</td>
<td>F</td>
<td>N</td>
<td>Visceral</td>
<td>4.7</td>
<td>No</td>
<td>Oweek, pain</td>
<td>Visceral</td>
<td>KS visceral</td>
<td>Other spindle cells</td>
</tr>
</tbody>
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Case Descriptions

Patient 1: 35-year-old presented with worsening painful swallowing, fever, weight loss and an enlarging mass in her throat. She had no cutaneous KS lesions.

Patient 2: 56-year-old with previously diagnosed KS presented with sore throat, dysphagia and persistent hypotension. A chest CT to work up her sepsis presentation showed extensive pulmonary nodules, raising concern for disseminated KS.

Patient 3: 42-year-old presented with abdominal pain, vomiting, diarrhea and 15 lb weight loss as well shortness of breath and cough with blood tinged sputum. Was intubated and treated for sepsis of unclear etiology. Passed away from hypoxic respiratory failure attributed to pulmonary KS.

Patient 4: 44-year-old presented with shortness of breath and dyspnea on exertion, was intubated and treated for presumed pneumonia and then developed adult respiratory distress syndrome. Three days before her demise, a lesion was noted on her left chest wall and biopsy confirmed KS. A chest CT showing nodules in the lungs raised suspicion for pulmonary KS.

Conclusions

- Of 102 individuals with biopsy-proven Kaposi Sarcoma identified in the Pathology Cancer registry, 6 female-at-birth were identified during the 8.5 years at our institution.
- All 6 women had evidence of mucosal or visceral disease which required chemotherapy and had high mortality and morbidity rates.
- The increased frequency of systemic symptoms and unique clinical behavior in women with KS may be related to increased likelihood of aggressive disease or that KS diagnosis was delayed in these women.
- Further studies are needed to better understand how biological sex affects KS disease behavior and progression, as well as response to treatment.

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