Exploring associations between Mpox-related health outcomes and HIV status

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In compliance with the Conflict of Interest Policies, the European AIDS Clinical Society (EACS) requires the following disclosure from the presenters:

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Purpose:

• To explore associations in
  - clinical presentation
  - Mpox-related complications
  - medical management outcomes

according to HIV status in individuals with Mpox
Methods:

- Individuals with **PCR-confirmed Mpox** diagnosed between **May – December 2022** at three large sexual health providers part of Chelsea and Westminster Hospital were included.

- Secondary routine data (demographics, medical history, clinical presentation and management) were collected from electronic patient records.

- $\chi^2$ and Mann-Whitney U tests were used to explore associations in the proportions of clinical outcomes and HIV status for categorical and continuous variables, respectively.
Results:

Demographics

- 857 individuals included in the study
  (23% of all UK cases, 35% of London cases)

- Median age 36 years (IQR 31-43)
- 29% people with HIV
  - of which 95% on ART and 90% with viral load < 50 cp/mL
- 39% UK-born
- 97% men having sex with men (MSM)
- 85% of people without HIV on PrEP
**Results:**

- **Skin lesions at peak (number), n = 857***
  - >10
  - 2-10
  - 1
  - No skin lesions

- **“Prodromal” symptoms, n = 857***
  - Sore throat
  - Myalgia
  - Fatigue
  - Fever

*No differences were found according to HIV status*
Results:

>3 anatomical sites with skin lesions

- Oral mucosa: Overall (n=857) vs People without HIV (n=608) with p = 0.01
- Limbs: Overall (n=857) vs People without HIV (n=608) with p = 0.96
- Body: Overall (n=857) vs People without HIV (n=608) with p = 0.01
- Perianus: Overall (n=857) vs People without HIV (n=608) with p = 0.02
- Genitalia: Overall (n=857) vs People without HIV (n=608) with p < 0.001
- Not on genitalia or perianus: Overall (n=857) vs People without HIV (n=608) with p = 0.003

Mpox clinical presentation
Clinical complications in people with Mpox *

Results:

- Tonsillitis
- Penile oedema
- Constipation
- Proctitis
- Cellulitis
- Anal pain

Overall (n=857)
PLWH (n=249)
People without HIV (n=608)

* No differences were found according to HIV status

* p = 0.2
Clinical complications in people with Mpx

Results:

- CD4 count < 350/mm c
- CD4 count > 350/mmc

Medical complications (any):
- Tonsillitis
- Penile oedema
- Constipation
- Proctitis
- Cellulitis
- Anal pain

Overall (n=857)
PLWH (n=249)
People without HIV (n=608)

p = 0.01
Additional medical management in people with Mpox

Results:

- Overall (n=857)
- PLWH (n=249)
- People without HIV (n=608)

- Laxatives
- Analgesia
- Antibiotic therapy

- Needing ANY additional medical treatment
- Hospital admission

*p = 0.2*
Additional medical management in people with Mpox

Results:

- Needing ANY additional medical treatment
- Antibiotic therapy
- Analgesia
- Laxatives
- Hospital admission

- Overall (n=857)
- PLWH (n=249)
- People without HIV (n=608)

- CD4 count >350/mc
- CD4 count < 350/mc

- PLWH (n=128)

Statistical significance:
- p = 0.001
- p = 0.2
## Results:

Concomitant STI rates in people with Mpox

<table>
<thead>
<tr>
<th>STI</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia</td>
<td>12%</td>
</tr>
<tr>
<td>Gonorrhoea</td>
<td>17%</td>
</tr>
<tr>
<td>Syphilis</td>
<td>5%</td>
</tr>
<tr>
<td>Herpes simplex</td>
<td>5%</td>
</tr>
</tbody>
</table>

Total people who were offered STI screening (n=745/857, 87%)
Conclusions:

No differences according to HIV status in:
- hospitalization rates
- medical complications
- adjunctive medical management

A CD4 count <350/mmc was associated to
- higher rate of complications
- increased requirement for medical interventions

Mpox is associated with
- high rates of complications (46%)
- frequent concomitant STIs (28%)
Conclusions:

No differences according to HIV status in:
- hospitalization rates
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Mpox is associated with
- high rates of complications (46%)
- frequent concomitant STIs (28%)

Mpox is RESOURCE INTENSIVE for sexual health clinics and attention to prevention (vaccination!) is KEY
THANK YOU

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