MANAGEMENT OF MPOX IN PEOPLE WITH HIV ATTENDING A SEXUAL HEALTH DEPARTMENT IN LONDON, UK

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BACKGROUND

- Mpox has disproportionately affected people with HIV (PWH) since its global spread and preliminary data suggest a higher burden of complications and worse outcomes in this group.
- Little is known on the impact generated by managing mpox in sexual health clinic and HIV outpatients' services and how PWH are affected by complications

METHODS

Anonymised and aggregated data on clinical characteristics, medical management, hospitalization rates and concurrent STIs rates in PWH with PCR-confirmed mpox infection who attended the sexual health services part of Chelsea and Westminster Hospital NHS Foundation Trust in London (UK) between May 15th- Dec 15th 2022 were retrospectively collected from electronic patient records. Acute proctitis was defined as rectal pain and tenesmus or purulent discharge, cellulitis as redness, swelling, and pain in the infected area of the skin, tonsillitis as acute tonsillar enlargement with pain and exudate, penile oedema as swelling of the penile glans or foreskin. Risk factors for clinical complications and hospital admission were extrapolated using Fisher's exact test.

RESULTS

249 PWH were included in the analysis (28.5% of the 873 total mpox diagnoses in our clinics) (demographics shown in table). Four individuals were newly diagnosed with HIV at time of mpox presentation, with 5% having a HIV viral load >200 copies/mL and 95% being on cART. Ten individuals had a CD4 count < 350/mm3 with an overall median CD4 count of 697/mm3 (IQR 544-897). Prodromal symptoms were common (fever 59%, fatigue 41%, myalgia 30%, sore throat 16%) and whilst 3% did not report any skin lesions, 10% presented with at least one skin lesion, 62% with 2-10 lesions and 24% over 10 lesions. Skin involvement had a predominantly perianal (52%), limb (45%) and genital (38%) distribution, with only a fifth of cases without perianal or the genital involvement. Complications occurred in 43% of cases, with perianal pain (26%), proctitis (14%), bacterial superinfection/cellulitis (12%), constipation (8%), penile oedema (4%) and tonsillitis (2%) being the most common. Additional medical management was often required (43%), with analgesia (32%), antibiotic therapy (26%) or laxatives (8%) prescribed most frequently. Eight individuals (3%) required hospital admission, with no fatal outcomes (3 due to proctitis/perianal pain, 2 due to skin tissue infections, one each due to dysphagia, general malaise and public health reasons). The presence of anal lesions and/or a CD4 count < 350/mmc were associated with a higher burden of medical complications (p< 0.02), with the latter also associating with hospitalization (p= 0.05). A total of 31% individuals had a concurrent STI at time of MPOX presentation: 18% had gonorrhoea (67% were rectal infections), 15% chlamydia (81% were rectal infections) and 8% syphilis.

MAIN FINDINGS

- Hospitalization rates due to mpox were low (3%) in a cohort of PWH with high rates of viral suppression and on effective cART (95%)
- 81% of PWH presented with perianal / genital lesions at time of mpox diagnosis
- Medical complications following mpox occurred in 43% of cases (proctitis 14%, cellulitis 12%, penile oedema 4%)
- 44% PWH with mpox required additional medical management (analgesia 32%, antibiotic therapy 26%)
- 31% of PWH with mpox were also diagnosed with a concurrent STI

PWH diagnosed with mpox (n=249)	n	(%)
Demographics		
Median age, years (IQR)	39	(33-47)
United Kingdom-born	75/245	(31)
Gay, bisexual or other men having sex with men (GBMSM)	244/249	(98)
Trans women	5/249	(2)
White ethnicity	171/231	(74)
Mixed ethnicity	22/231	(10)
Black British / Afro-Caribbean / Black African ethnicity	17/231	(7)
Median number of sex partners within 90-days prior mpox, (IQR)	3 (2-6)	
cART history		
On cART at time of Mpox diagnosis	227/239	(95)
Latest HIV viral load >200 copies/mL	12/242	(5)
Median CD4 cell count /mmc (IQR)	697 (544-897)	
Latest CD4 cell count <350/mmc	10/200	(5)
Clinical presentation		
- Fever, febrile chills	147/248	(59)
- Fatigue / asthenia / lethargy	101/248	(41)
- Myalgia	74/248	(30)
- Sore throat	39/248	(16)
- Headache	8/248	(3)
No prodromal symptoms	66/248	(27)
Prodromal symptoms presenting after the onset of skin lesions	11/141	(8)
Skin lesions localization		
- Perianal	130/249	(52)
- Limbs	113/249	(45)
- Genital (penile, scrotal, pubic)	94/249	(38)
- Body (chest, torso, abdomen, back)	80/249	(32)
- Facial (forehead, scalp, neck, nose, lip)	71/249	(29)
Number of skin lesions		
- No skin lesions	7/241	(3)
- Single lesion	25/241	(10)
- 2-10	150/241	(62)
- 11-25	51/241	(24)
- 26-100	8/241	(3)
Inguinal lymphadenopathy	112/249	(45)
Oral mucosa involvement	11/249	(4)

PWH diagnosed with mpox (n=249)	n	(%)
Clinical complications	108/249	(43)
- Anal pain	64/249	(26)
- Proctitis	35/249	(14)
- Cellulitis / bacterial skin superinfection	31/249	(12)
- Constipation	21/249	(8)
- Penile oedema	9/249	(4)
- Tonsillitis	6/249	(2)
Hospital admission (for clinical reasons)	7/249	(3)
Additional medical management	109/249	(44)
- Analgesia (topical and/or per os)	79/249	(32)
- Antibiotic therapy	64/249	(26)
▪ Penicillins	43/249	(17)
▪ Doxycycline	20/249	(8)
▪ Cephalosporins	3/249	(1)
- Laxative therapy	20/249	(8)

CONCLUSIONS

- We observed low hospitalization rates due to mpox in PWH on effective cART attending our sexual health clinics.
- CD4 cell count <350/mmc was associated to a higher burden of medical complications and hospitalizations
- Complications requiring further management and concomitant STIs were common, requiring additional medical resources.
- Comparative analysis with people without HIV and PWH with severe immunodepression are needed to define risk factors for hospitalization and clinical complications.

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