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BACKGROUND

- Since the start of the Mpox outbreak on May 14, 2022 more than 82,000 cases of infection have been reported in 110 countries.
- HIV co-infection is a prevalent condition among individuals with Mpox.
- To date, information about the risk of severe monkeypox virus (Mpox) disease in PLWH is not well established

METHODS

- **Design:** National case-series study (18 hospitals, Spain).
- **Patients:** Patients with PCR-confirmed MPXV infection since April 27th to September 30th.
- **Definitions: duration of the clinical course:** from the onset of symptoms until mucocutaneous lesions complete clearance or MPXV infection-related complications resolution. **Disseminated disease:** presence of mucocutaneous lesions involving 6 or more areas of the body surface. **Severe complications:** extensive superinfection of skin lesions without response to treatment, pain refractory to non-opioid analgesia, sepsis, odynophagia with obstructive sensation, myopericarditis, gastrointestinal bleeding, encephalitis, or ophthalmologic complications.
- **Main outcome: Severe MPXV disease:** i) duration of the clinical course ≥ 21 days, or; ii) disseminated disease, or; iii) emergence of severe complications, or iv) requirement of hospital admission.

Patients with *uncontrolled HIV infection*, due to lack of effective ART, are at higher risk of *severe Mpox*

Table 2. Clinical outcomes

Parameter	HIV and viral load \geq 1000 cp/mL (n=19)	HIV viral load and < 1000 cp/mL (n=429)	Individuals without HIV infection (n=580)	p-value
Systemic symptoms, n (%)	17 (89)	304 (71)	392 (69)	0,129
Duration*	28 (26-40)	21 (16-26)	21 (15-26)	0,004
Anogenital lesions, n (%)	11 (65)	297 (71)	419 (75)	0,107
Disseminated disease, n (%)	5 (29)	16 (4)	15 (3)	0,002
Complications, n (%)	3 (16)	50 (12)	59 (10)	0,337
Hospital admission, n (%)	4 (22)	20 (5)	13 (2)	< 0,001
Death, n (%)	0	0	1 (0.2)	---

* Median (Q1-Q3)

Table 4. Risk factors of severe Mpox severe disease[§]

Categories	Severe disease n (%)	ORa (95% CI)	p-value
Sex at birth	Male 407 (40) Female 4 (36)	1.11 (0.32-3.82) Ref.	0.872
Age (years)	< 38 182 (39) ≥ 38 222 (41)	1.01 (0.99-1.02)	0.331
CD4 cell count (cels/mm ³)	HIV negative ≥ 350 164 (41) < 350 16 (61)	Ref. 1.77 (0.76-4.14)	0.185
HIV viral status (c/mL)	HIV negative < 1,000 174 (41) $\geq 1,000$ 14 (74)	Ref. 5.65 (1.55-20.56)	0.009

[§]Ajusted by sex, age, CD4 cell counts and plasma HIV viral load at the time of Mpox

CONCLUSIONS

- PLWH, considered as a whole, are not at a greater risk of MPXV severe disease.
- However, those with uncontrolled HIV infection, due to lack of effective ART, develop more severe outcomes.
- Efforts should be done to increase HIV testing and to ensure linkage to HIV care services. In this setting, ART must be immediately started.

RESULTS

Table 1. Characteristics of the patients (N=1,028)

Parameter	HIV and viral load \geq 1000 cp/mL (n=19)	HIV viral load < 1000 cp/mL (n=429)	Individuals without HIV infection (n=580)	p-value
Sex at birth, Male, n (%)	19 (100)	426 (99)	572 (98)	0.231
Age (years)*	32 (26-39)	40 (43-46)	36 (31-44)	< 0.001
Sexual orientation, MSM, n (%)	18 (95)	416 (98)	494 (90)	< 0.001
Sexual transmission, n (%)	19 (100)	419 (99)	509 (93)	< 0.001
Nadir CD4 cell count (cels/mm ³) *	393 (259-519)	429 (280-606)	---	0.451
HIV CDC clinical category, A, n (%)	11 (100)	210 (83)	---	0.131
CD4 cell count, n (%)	414 (253-660)	783 (597-980)	---	< 0.001
PrEP, n (%)	---	---	148 (25)	---

* Median (Q1-Q3)

Table 3. Complications of Mpox virus infections (n=112)

Type of complication	n (%)
Superinfection of skin lesions	77 (69)
Pain refractory to nonopioid analgesia	10 (10)
Odynophagia with obstructive sensation	8 (7)
Gastrointestinal bleeding	4 (4)
Paraphimosis	2 (2)
Ophthalmologic complications	1 (1)
Sepsis	1 (1)
Myocericarditis	1 (1)
Encephalitis	1 (1)
Others	7 (6)

ADDITIONAL KEY INFORMATION

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