

Title: Clinical and epidemiological profile of the 2022 Mpox outbreak in Spain.

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Background.

Before the current outbreak of Mpox, isolated cases had already been diagnosed outside the endemic area, as well as sporadic outbreaks. We conducted a multicentric national study (SEIMC-CEME-22). The main objective of the study was to describe the clinical and epidemiological profile of the current Mpox outbreak in Spain, including the management of the disease.

Methods.

Retrospective national observational study conducted by the Spanish Society for Clinical Microbiology and Infectious Diseases (SEIMC-GESIDA). We included patients with a confirmed Mpox diagnosis by specific real time PCR before 13th July 2022, and attended at the Spanish health network (including primary care, general hospitals, and STI clinics). Epidemiological, clinical and therapeutic data were collected.

Results.

A total of 1,472 patients from 52 centers were included. The great majority of them (99%) were cis-gender men, middle-aged (38.6 years old). 98.6% were residents in Spain. The main suspected route of transmission was sexual exposure, primarily among men who had sex with other men (MSM). Occupational exposure was reported in 6 cases (0.4%). Immunosuppression was present in 40% of patients, mainly due to HIV infection. Only 6.5% of patients had been vaccinated against orthopoxvirus. Virus sequencing was performed in 147 cases (all of them B.1 lineage).

Rash (mainly monomorphic macular) was the most frequent symptom (95.7%), followed by fever (48.2%), adenopathies (44.4%) myalgias (20.7%), proctitis (17%) and headache (14.7%). Rare complications were paraphimosis (1.4%), conjunctivitis (0.8%) and stiff neck (0.1%) Simultaneously diagnosed STI included syphilis (129), gonococcal infection (91), HIV (67), chlamydia (56), hepatitis B virus (14) and hepatitis C virus (11).

No therapy was used in 479 cases (33%). Symptomatic therapies and antibiotics were used in 50% cases. Systemic corticoids were used in 90 patients. Tecovirimat (6 patients) and cidofovir (13 patients), but no brincidofovir, was used. Smallpox immunoglobulins were used in one patient. Hospitalized admission was necessary in 58 cases (4.2%). One patient died.

Conclusion: The Mpox outbreak in Spain affected primarily middle-aged men who were sexually active and showed a high rate of HIV infection. The major symptom was maculopapular rash. A range of heterogeneous therapeutics options were performed.