

Monkeypox virus transmission in tattoo parlor

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SUMMARY

In monkeypox virus (MPXV) transmission caused by contaminated material, we have to consider that recently the outbreak of several MPXV cases was linked to tattoo parlors in Cadiz, Spain. These tattoo parlors did not cause a single outbreak, but instead are an established transmission route for MPXV, underscoring the need for increased awareness.

We recommend increasing awareness among tattooists and piercers not only to protect their own safety and health, but also to prevent spreading the virus to their customers. Personal protective equipment such as gloves should be utilized and vaccination can be considered for those at risk of occupational exposure.

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INTRODUCTION

Recently, several MPXV cases were linked to tattoo parlors in Cadiz, Spain (Viedma-Martinez *et al.*, 2023; Del Rio *et al.*, 2022; <https://www.rtve.es/noticias/20220724/brote-viruela-del-mono-negocio-tatuajes-cadiz/2391122.shtml>). The reported outbreak may not be limited to southwest Spain, because another case was detected in Barcelona (Tascini *et al.*, 2022) pointing to a potential underestimation of the MPXV epidemic via tattoo parlors. This case is described below.

CASE REPORT

In July 2022, a 39-year-old male Italian tourist reported fever and maculo-vescicular lesions in a recently tattooed skin area. The tattoo was performed in Barcelona (Spain) 7 days prior to the onset of symptoms. Swab testing of the area confirmed the presence of MPXV by PCR assay. After 7 days, the cutaneous lesions were completely resolved.

DISCUSSION

Tattoos are renowned potential infection sources, as contaminated instruments and colonized ink/sa-

liva may favor local inoculation leading to infections (Tampa *et al.*, 2022). Moreover, prolonged close interaction with infected symptomatic or asymptomatic persons may facilitate virus transmission through unprotected contact with skin, inadvertent splashes of saliva or contaminated fomites such as linen and clothing (Abu-Hammad *et al.*, 2023). Viable MPXV was detected on household surfaces after at least two weeks, specifically on porous surfaces such as clothing and linens (Morgan *et al.*, 2022) which could suggest an extended infectivity period of the virus.

As other infective agents present with greater latency and slower time to symptoms, a direct association with the infective source is more challenging. Conversely, MPXV lesions typically appear within the tattoo area (Viedma-Martinez *et al.*, 2023; Tascini *et al.*, 2022), so correlations are straightforward.

The tattoo parlor is not the source of a single outbreak (Viedma-Martinez *et al.*, 2023; <https://www.rtve.es/noticias/20220724/brote-viruela-del-mono-negocio-tatuajes-cadiz/2391122.shtml>), but instead an established transmission route for MPXV, underscoring the need for increased awareness.

In conclusion, we increasing awareness among tattooists and piercers not only to protect their own safety and health, but also to prevent spreading the virus to their customers. Points to consider include the importance of instrument sterilization and hand/work environment hygiene. Personal protective equipment such as gloves should be utilized and vaccination can be considered for those at risk of occupational exposure.

Key words:

Monkeypox virus, Tattoo parlor, Transmission.

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Conflict of interest

CT has received funds for speaking at symposia organized on behalf of Pfizer, Novartis, Merck, Angelini, Thermofischer, Biomerieux, Basilea, Correvio, Zambon, Hikma and Astellas. All other authors: None.

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