

# A Case of Molluscum Contagiosum after Nylon-Towel Scrubbing: An Unusual Transmission

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Molluscum contagiosum (MC) is a common, benign, viral infection of the skin and mucous membranes that generally affects children. In adults, the condition may be transmitted sexually. Histopathologically, there is a downgrowth of infected epidermal cells bearing large eosinophilic cytoplasmic inclusion bodies. Herein, we report a case of molluscum contagiosum which occurred in 31-year-old Korean woman with several elevated flesh-colored umbilicated papules following use of a tough nylon towel at a spa.

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*Key Words:* Molluscum contagiosum

## INTRODUCTION

Molluscum contagiosum (MC) is a poxvirus infection of the skin characterized by discrete, smooth, pearly to flesh-colored, dome-shaped papules, often umbilicated with a white, cordlike core; these papules frequently cluster in groups<sup>1</sup>. MC virus is transmitted by person-to-person contact and possibly by fomites, as poxviruses are resistant to desiccation. The inoculation period is two to seven weeks. It involves the face, trunk and extremities, and may resolve spontaneously within two to four months.

## CASE REPORT

A 31-year-old woman presented with small papules on her arms. These lesions were noted about two weeks after she visited a spa. At the spa she

removed a mud treatment by scrubbing her body with a rough bath towel that was shared by others. The custom of scrubbing with a rough bath towel is common at spas in South Korea. Ten days later, the patient noted several skin-colored erythematous papules at the sites scrubbed with the towel at the spa. Physical examinations revealed several adjacent, raised, flesh-colored to slightly reddish, centrally umbilicated, hard papules on the arms (Fig. 1). No other specific skin lesions were found. The patient had no previous history of skin diseases or recurrent infection and had no recent sexual contact. There

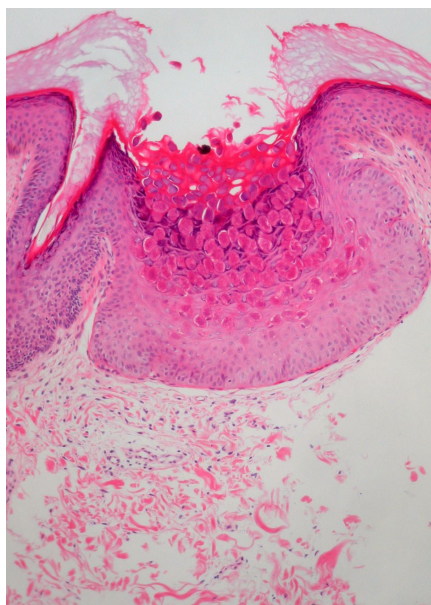


**Fig. 1.** Several, flesh-colored to erythematous, centrally umbilicated, hard papules on the arm.

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**Fig. 2.** Multiple molluscum bodies within the epidermis (H & E,  $\times 100$ ).

was no family history of infectious disease. Laboratory findings including complete blood cell counts, blood chemistry studies, urine analysis, chest X-ray and EKG were all within normal limits; an HIV test also revealed negative. A biopsy specimen showed a finding of a hypertrophic and hyperplastic epidermis that contained intracytoplasmic inclusion bodies (molluscum bodies) (Fig. 2). Based on the clinical appearance and histological findings, a diagnosis of molluscum contagiosum was made. After curettage, recurrence was not observed for a year.

## DISCUSSION

Molluscum contagiosum is a cutaneous skin neoplasm caused by a DNA virus from the poxvirus family<sup>2</sup>. Spread of the infection is presumed to be due to direct contact, contact by contaminated fomites as well as by communal activities such as public or Turkish baths, sharing bath towels in gymnasiums, wrestlers, masseurs, tattooing and swimming public pools<sup>3,4</sup>. Schwartz et al.<sup>5</sup> found that lesions identified in patients with HIV infection were limited to the face and neck region, and noted that extensive MC of facial hair areas was common,

suggesting spread through shaving. Lee et al.<sup>6</sup> described a case of molluscum folliculitis after shaving leg hair. There is another case report of cutaneous transmission of MC during an orienteering competition<sup>3</sup>. Here we report a case of a woman who developed MC after vigorous friction with a communal rough nylon towel used at a spa. In this case, molluscum contagiosum was noted within two weeks of using the towel considering the incubation period for MC ranges between two and seven weeks<sup>2</sup>, this is consistent with the history of the patient presented here. We suspect that the shared rough nylon towel at the spa was the possible route of viral spread after breaking the skin barrier. We propose the pathogenic hypotheses that the towel was a primary source of MC infection due to being an 'ideal environment' in which to harbor the MC virus, that or the spa may have been contaminated by viruses and the virus was inoculated easily through the abrasion site. This patient appeared to suffer minor abrasions from scrubbing with the towel, and then inoculation with the virus occurred.

Therefore, clinicians should consider that viral disease, especially MC, can be transmitted directly or indirectly by disrupting the skin barrier, and suggest that bathers, especially immunodeficient patients, should refrain from scrubbing their bodies with a shared bath towel.

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