Autoinoculation as a treatment modality for molluscum contagiosum: A preliminary uncontrolled trial

Sir,

Molluscum contagiosum (MC) is a self-limiting skin infection caused by poxvirus, commonly seen in children with a prevalence of 8–12%. Infection follows contact with infected persons or contaminated objects, and the diagnosis is clinical. Homologous autoimplantation is a simple technique which helps in inducing a cell-mediated immune response to the antigens, aiding clearance of both local and distant lesions. Previous experience of good clearance of verruca vulgaris by autoimplantation prompted us to assess the utility of this technique in molluscum contagiosum.

A prospective study was conducted in the Department of Dermatology of MDM hospital, Dr SN medical college, Jodhpur for 6 months among 58 patients. The patients were subjected to complete work up including detailed history and examination of lesions. Except lactating mothers, pregnant/immunosuppressed patients, and those with a history of intake of immunomodulatory/immunosuppressive drugs we included all clinically diagnosed cases in our study. Institutional ethical clearance and proper written consent was obtained after counseling, and a treatment free washout period of 3 months was ensured. A single session of autoinoculation was performed. The patients were followed up at 7 days, and thereafter every 2 weeks for 3 months to look for clearance and another 3 months to check for relapse.

The response to therapy was graded as follows:
- Excellent, >75% of lesions disappeared
- Good, 51–75% lesions disappeared
- Average, 26–50% lesions disappeared
- Poor <25% lesions disappeared.

A well-developed lesion was chosen as a donor, under topical anesthesia, and using all aseptic precautions, it was approached using an insulin syringe and pierced from a site just adjacent to the lesion. It was then repeatedly punctured from within 5–7 times to expose the contents of the molluscum body to the dermis by crossing basement membrane, hence inoculating and exposing the viral antigen to the immunological surveillance system. After the procedure fusidic ointment was applied locally over the punctured site [Figure 1].

A total of 32 (55.2%) patients showed complete resolution of the lesions within 3 months. There was partial response

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**Table 1: Various parameters at each follow up visit**

| Parameters                      | Initial | 1st week | 3rd week | 5th week | 7th week | 9th week | 13th week |
|---------------------------------|---------|----------|----------|----------|----------|----------|-----------|
| Total number of lesions         | 1173    | 1037     | 765      | 590      | 424      | 284      | 215       |
| Maximum/minimum number of lesion| 70/5    | 67/4     | 42/0     | 33/0     | 25/0     | 20/0     | 15/0      |
| Average                         | 20.57   | 17.87    | 13.18    | 10.17    | 7.31     | 4.89     | 3.70      |
| Standard deviation              | 15.82   | 15.45    | 11.51    | 9.10     | 6.98     | 5.79     | 4.84      |

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**Figure 1:** Puncturing of lesion from within

**Figure 2:** Percentage of patients who showed clearance of lesions.

| Week | % of pt showing clearance of lesion | No of patients |
|------|-------------------------------------|---------------|
| 1    | 0                                   | 0             |
| 3    | 3.44                                | 2             |
| 5    | 12.06                               | 10            |
| 7    | 17.24                               | 23            |
| 9    | 39.65                               | 32            |
| 12   | 55.17                               | 32            |
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Lesions or checking for serospecific antibodies. Spontaneous clearance of molluscum lesions during the trial could not be excluded, and thus a placebo controlled trial would be necessary to establish the exact therapeutic efficacy.

The modified technique of autoimplantation of molluscum is a safe, effective, and rapid procedure for its treatment. Our study indicates that autoinoculation therapy holds promise in the management of this infection. Being an easy day-care procedure, it is also a cost-effective option.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the legal guardian has given his consent for images and other clinical information to be reported in the journal. The guardian understands that name and initial will not be published and due efforts will be made to conceal patient identity, however, anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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