Molluscum contagiosum in Children and Its Relationship to Attendance at Swimming-Pools: An Epidemiological Study

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As a result of the concern felt by several general practitioners in Osakidetza-Basque Health Service, the Public Health Service of San Sebastian (Basque Country, a region of Spain) decided to take on a preliminary descriptive study to determine the relationship between the transmission mechanisms of molluscum contagiosum (MC) and attendance at swimming-pools.

Osakidetza provides a Public Health Service which is available to all the Basque population. Normally 89% of the Basque population visit their general practitioner or paediatrician at the Osakidetza health centres. Out of these, 17% occasionally attend private facilities as well. The remaining 11% only seek private medical care.

Ordizia, a municipality in the Basque Country, was selected as the geographical area for the study, in which there was only one paediatrician. The records included all the cases of MC diagnosed by the paediatrician in the area retrospectively from June and prospectively until December 1992. A telephone survey of the parents of those affected was designed in order to complete epidemiological informations.

A random sample of 24 children (12 male, 12 female; median age: 9 years; range: 4-13), taken from the census in Ordizia, was also selected as a control group. They were questioned by telephone in order to complete the same questionnaire used in the cases of MC.

Twenty-four cases (median age: 9 years; range: 4-13) of MC were recorded by the paediatrician in Ordizia in 1992. Sixteen were male and 8 female. All cases regularly attended the municipal swimming-pool, with the exception of one. The MC lesions were most frequently located on the upper and

Table 1. Frequency of attendance at the swimming-pool

<table>
<thead>
<tr>
<th>Cases</th>
<th>Controls</th>
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<tr>
<td>12 (50) 4 (17)</td>
<td>12' (50) 202 (83) 24 (100) 24 (100)</td>
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High frequency = Daily or once or twice a week throughout the year; low frequency = once or twice a month, only summer months when climate favourable, only 1 month a year (school), never. Figures in parentheses indicate percentages.
lower limbs and the back, and less frequently on the thorax, face and neck, abdomen, axillae and groin.

Frequency of attendance at the swimming-pool was categorized as high or low (table 1). A high frequency of attendance at the swimming-pool was significantly more frequent in MC patients (50%) than in the control group (17%, $\chi^2$ test; p < 0.02).

This short case-control study suggests the possible transmission of MC in swimming-pools. A wide range of optimum factors for interpersonal transmission converges in a swimming-pool, the anatomical distribution of lesions suggesting a direct contact [1].

Reference