

MILKER'S NODULES

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Milker's nodules were seen in a 22-year-old rural girl who was milking cows. Asymptomatic symmetrically placed nodules with target appearance were present over dorsum of both index fingers. Diagnosis was confirmed histopathologically.

Key Words : Milker's nodules

Introduction

Farmyard pox is the proposed name for a group of diseases; milker's nodules, orf and bovine papular stomatitis pox which are clinically identical in man and are induced by currently indistinguishable parapox viruses occurring in cow milkers, sheep handlers and workers in contact with calves or cow respectively.¹ Milker's nodules are transmitted to cattle handlers from teats of cows, which are infected by pseudocowpox or paravaccinia virus² or pox virus. Disease provides lasting immunity, and there is no cross immunity with the cow pox, vaccinia or variola group of pox viruses. The disease has been transmitted experimentally from human to human, and from human to cow.³

Case Report

A 22-year-old rural unmarried girl, giving history of milking apparently healthy cows since the age of 15 years approximately, presented with asymptomatic, but cosmetically disturbing, 1x1 cm, symmetrically placed nodular lesions over dorsum of proximal phalanges of both index fingers of 2 months duration. They had target appearance, with an erythematous centre, surrounded by a hypopigmented ring and a red halo (Fig 1). There was no associated fever, constitutional

symptoms or regional lymphadenopathy.

Excision biopsy of the nodule over the right index finger revealed hyperkeratosis, parakeratosis, acanthosis without

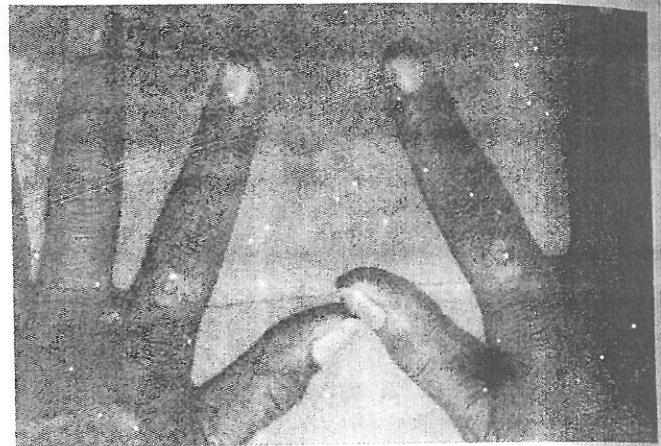


Fig. 1. Asymptomatic, 1x1 cm, symmetrical nodules with target appearance over both index finger.

pseudoepitheliomatous hyperplasia; occasional foci of spongiosis with inclusion bodies, newly formed dilated capillaries and a predominantly monocytic upper dermal infiltrate.

Comments

Milker's nodules is a self limiting disease with a good prognosis. It generally has an incubation period of 4 to 7 days, though it may be as long as 2 weeks. Each lesion usually heals spontaneously in 4-6 weeks without scar formation.

Leavell and Phillips⁴ have described 6 clinical stages, each lasting about a week. (1) The maculopapular stage. (2) The target stage

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during which the lesions have a red centre, a white ring and a red halo. (3) The acute weeping stage. (4) The nodular stage, which shows hard non tender nodules. (5) The papillomatous stage, in which the nodules have an irregular surface, and (6) The regressvie stage during which the lesions involute without scarring. Occasional cases of bullous reaction in cases of milker's nodules have been reported, though secondary eruptions of non bullous erythema multiforme type occur in more than 20% of cases.⁵

Orf, milker's nodules and cutaneous form of bovine papular stomatitis pox are distinguished from each other solely by the patient's history, being identical in clinical, histological and virological examination.¹

In present case, the incubation period was difficult to estimate, as she used to milk the cows daily for the last 5-7 years. It was unique as she presented with the target stage from the beginning, and the lesions tended to

persist in the same stage during the period of observation. Also histopathology revealed acanthosis, but without pseudoepitheliomatous hyperplasia, as is usually the case.

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