Tick inoculation in an eyelid region: report on five cases with one complication of the orbital myositis associated with Lyme borreliosis

Wszczepienia kleszczu w rejonie policzków – przedstawienie pięciu przypadków z komplikacją w postaci zapalenia mięśni oczu spowodowanego borrelią

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Summary: Purpose: To determine the frequency and dependency of Lyme borreliosis after tick infestation in the eyelid region.

Material and methods: Five patients after tick inoculations were investigated by immunohistochemical assays for IgG and IgM antibodies to Borrelia burgdorferi. One positive test was followed by an immune immunometric and immunoassay (two-step system). Immunohistochemical evaluation of myositis was confirmed with MRI, laboratory, and internal clinical investigations.

Results: Four children showed negative Borrelia serology after a biopsy from a tick. In one case the left orbit was removed, which was diagnosed in MRI as a blackened left lateral rectus muscle. The diagnosis of myositis with positive Borrelia burgdorferi serology was confirmed with Lyme borreliosis. The laboratory examinations were negative. The treatment was performed after treatment with corticosteroids.

Conclusions: Lyme borreliosis was found in two patients after tick infestation in the eyelid region. Immunohistochemical tests against Lyme borreliosis with ampicillin are recommended for children after tick bite.

Stwoń kluczowe:

Key words: tick, eye-lid, Borrelia burgdorferi, orofacial neuroborreliosis.

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The incidence of Lyme borreliosis (Lyme disease) in Poland is estimated to be 0.5 to 1.0% of the population. In recent years, the number of cases has increased significantly. Tick-borne diseases are becoming more common and require more attention. Lyme borreliosis is a disease caused by the bacterium Borrelia burgdorferi, which is transmitted to humans through the bite of infected ticks. The disease can affect any part of the body, including the eyes.

In this study, we investigated five patients who were bitten by ticks in the eyelid region. We performed a biopsy of the affected area to detect Borrelia burgdorferi. The results showed that four patients had negative Borrelia serology, but one patient had positive serology. The patient had a blackened left lateral rectus muscle, indicating myositis associated with Lyme borreliosis.

Conclusions: Lyme borreliosis can affect the eyes, and it is important to consider this diagnosis in patients with eye symptoms after tick bites. Immunohistochemical tests against Lyme borreliosis with ampicillin are recommended for children after tick bite.