Thyroid Disorder: A Possible Forgotten Clinical Feature of Monkeypox

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Monkeypox is an uncommon pox infection that has resurfaced, most likely due to zoonosis [1]. Monkeypox has spread in multiple European countries, posing a serious public health threat [2]. The possibility of human-to-human transfer is being researched. The medical community is concerned as the number of reported cases in various nations rises, and suitable preparation is essential. We must act quickly to undertake a proper inquiry and implement the necessary processes [2].

The frequency of new cases in substantial clusters in several countries outside of Africa, mainly in America and Europe, has rapidly increased in 2022, raising concerns about larger-scale (statewide or nationwide) outbreaks. Monkeypox is a febrile sickness distinguished by a skin rash. The patient’s skin rash is usually used to make the first diagnosis. Fever is also common; however, it is crucial to note that not all patients have fever and rash, and an unusual clinical presentation is possible [1,3]. The unusual clinical appearance of monkeypox is intriguing, and endocrine problems comprise one of numerous unusual manifestations. According to a clinical animal model, endocrine disruption in monkeypox infection is likely, with the thyroid being the most impacted organ [4]. Thyroiditis is a possible pathological condition associated with monkeypox [4].

According to Zaucha et al. [4], unusual findings associated with monkeypox included necrotizing conjunctivitis and thyroiditis. Those authors reported that the monkeypox virus antigen was found in conjunctival epithelial cells and fibroblasts, but inadequate material was available for immunohistochemical testing due to the small size of the thyroid lesion [4]. The researchers did not observe the involvement of other endocrine organs, including the breast, parathyroid, pituitary, adrenal, and prostate glands. Humans could develop a clinical condition similar to this. Due to the current global spread of monkeypox, it is crucial to recognize the possibility of thyroid illness in human monkeypox. Cases of unexplained thyroid disease should be properly investigated for monkeypox.

Finally, the processes by which viral infections, such as coronavirus disease 2019 (COVID-19) and monkeypox, influence the thyroid are fascinating. Possible pathomechanisms include direct invasion of endocrine organs and immune-mediated injury [5]. The prior observation of viral components in infected animals [4] could be a signal supporting the concept that the thyroid gland is directly involved in monkeypox.

CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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