Warthin-Finkeldy cells - A soft indicator in cytodiagnosis of Kimura

Warthin-Finkeldy cells are multinucleated giant cells having an appearance akin to “Grape-like clusters” or “Mulberry.” These are large cells enclosing multiple, round, regular-sized nuclei having inconspicuous nucleoli. These cells were described in the same year (1935) by contemporaries Warthin and Finkeldy in the tonsils of children suffering from measles. These cells are seen in enlarged lymph nodes associated with conditions such as measles, Kimura, systemic lupus erythematosus, and human immunodeficiency virus. These cells have shown to have a T-cell immunophenotype. We report a case of bilateral cervical lymphadenopathy where the presence of Warthin–Finkeldy cells on fine needle aspiration cytology proved to be a soft indicator of Kimura disease.

Fine needle aspiration cytology (FNAC) was done on a 42-year-old man who presented with bilateral painless firm neck swellings [Figure 1a] extending from the posterior aspect of the ear lobe to the angle of the mandible. The patient gave a history of these swellings waxing and waning in size over a period of 8 years. Investigations revealed a peripheral blood eosinophilia of 30% with an absolute count of 4200/cumm. His serum IgE levels were also raised. FNA was attempted on both swellings. The aspirate smears from the lesion were cellular with a hemorrhagic background. The smears were composed of a polymorphous population of lymphoid cells composed of centrocytes, centroblasts, mature lymphocytes, and tingible body macrophages against a background of lymphoglandular bodies [Figure 1b], which was suggestive of a reactive lymphoid hyperplastic process. Also seen were prominent admixture of eosinophils [Figure 1c] with scattered “Grape-like” multinucleated polykaryocytes (Warthin–Finkeldy cells) [Figure 1d] and endothelial cell fragments. No Reed Sternberg, Reed Sternberg-like cells, or epithelioid endothelial cells seen. A biopsy was not performed in this case as the diagnosis of Kimura was established based on the clinical features, characteristic cytological features seen on FNA, and laboratory evidence of eosinophilia and raised IgE levels. The patient refused a conservative surgical excision offered to him in view of large lesions. However, the patient was started on oral prednisolone 1 mg/kg/day with gradual tapering of the dose after the first week. At the end of the first week, the patient showed a marginal decrease in the size of the lesion with normalization of the peripheral blood eosinophilia. Because the lesion is notoriously known to relapse, the patient has been advised close follow-up.

Kimura is an uncommon reactive chronic inflammatory process of unknown etiology. The disease is seen to affect males of Asian origin in the 3rd to 4th decade of life. The usual site is the head and neck region with involvement of the cervical lymph nodes and frequent involvement of the adjoining deep dermis, subcutis, and salivary gland. The patient usually has a history of atopy, with evidence of absolute eosinophilia and raised IgE levels. Being an external swelling, these patients can be subjected to FNAC to ascertain the diagnosis. Aspirate show a polymorphous lymphoid population with characteristic admixture of eosinophils and presence of scattered multinucleated polykaryocytes (Warthin–Finkeldy cells). The presence of polykaryocytes and absence of large atypical cells help the cytopathologist to differentiate with the other possibilities such as filarial lymphadenitis, drug-induced lymphadenopathy, eosinophilic granuloma, Hodgkin’s lymphoma, eosinophilic myeloid disorder, and angioimmunoblastic T cell lymphoma.
The closet mimic, however, remains angiolymphoid hyperplasia with eosinophilia (ALHE). ALHE affects females and presents with reddish cutaneous papules and nodules behind the ear lobe. These patients do not have peripheral blood eosinophilia or raised IgE levels. FNAC of ALHE, being a primarily vascular lesion, is defined by the presence of numerous histiocytoid endothelial cells and absence of Warthin–Finkeldy cells.[3]

Thus, diagnosis of Kimura – an uncommon entity – can be confidently made on FNAC by demonstrating the presence of Warthin–Finkeldy cells and eosinophils admixed in a polymorphous reactive lymphoid population in a patient having characteristic clinical features and laboratory evidence of eosinophilia and raised IgE levels.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest
There are no conflicts of interest.

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Announcement of New Award Instituted by Indian Academy of Cytologists in 2017 for Best Published Article in Journal of Cytology

Dr. Panna Choudhury Memorial Award
1. This award shall be given to the best original article published in the Journal of Cytology during the past one year.
2. The award comprises of a gold plated silver medal and a certificate.
3. Only IAC members are eligible for this award.
4. The following criteria shall be followed in selection of the awardee:-
   (a) Publication should be in Journal of Cytology.
   (b) Publication should be during the past one year and shall comprise of papers from Issues 3 and 4 of previous year and Issues 1 and 2 of current year.
   (c) Ahead of print articles shall not be considered for the award.
   (d) Publication should be an original article.
   (e) The awardee shall be the first author of the published paper.