



Chronic epipharyngitis: A missing background of IgA nephropathy



ARTICLE INFO

Keywords:

Immunoglobulin A nephropathy (IgAN)

Hematuria

Epipharyngitis

Hematuria, an essential symptom of immunoglobulin A nephropathy (IgAN), often occurs concomitantly with acute pharyngitis. Although the pathological factors that aggravate hematuria have not been fully elucidated, activation of innate immune response in the nasopharynx-associated lymphoid tissue is thought to play an important role. The epipharynx is an immunologically activated site even under normal conditions, and enhanced activation of innate immunity is likely to occur in response to airborne infection [1].

A remarkable characteristic of epipharyngitis is “easy bleeding” due to submucosal congestion; therefore, diagnosis can easily be established using epipharyngeal abrasive procedures, such as transnasal cotton swabbing with optimized bleeding during abrasion (Fig. 1) [1,2]. Notably, latent but significant epipharyngitis frequently exists even in healthy individuals. In our experience, mild to moderate epipharyngitis was observed in 24 of 39 healthy control subjects (61.5%) despite the absence of pharyngitis-related symptoms. This is consistent with the finding of a previous report in which moderate inflammation was observed in 141 of 202 school children (69.8%) [2].

Surprisingly, severe epipharyngitis was observed in 682 of 686 (99.4%) patients with IgAN (mean age, 38 [range 16–73 years]; previous tonsillectomy, 277; previous pulse steroid therapy, 299) who visited the Hotta Osamu Clinic between September 2011 and August 2018 for a second opinion on treatment for IgAN. All these patients had

microscopic hematuria, but none exhibited gross hematuria at the time of visit. Moreover, a high incidence of severe epipharyngitis was noted regardless of sex, age, renal function, nephritis severity, and previous pulse steroid therapy or tonsillectomy. Despite the extremely high incidence of epipharyngitis, most patients did not report pharyngitis-related symptoms such as sore throat at the time of examination. Thus, the incidence of severe chronic epipharyngitis is remarkable not only in patients exhibiting gross hematuria accompanying pharyngitis, but also in asymptomatic patients with IgAN.

The innate immune system plays a key role in protecting the mucous membranes against various pathogens through pattern recognition receptors, mainly Toll-like receptors (TLRs) [3]. Although enhanced expression levels of TLRs have been shown in patients with IgAN [4,5], its etiology has not been fully elucidated. As most IgAN patients present with severe epipharyngitis, chronic inflammation of the epipharynx may be a very common background condition of IgAN. Given that epipharyngitis and its effects on IgAN are not fully understood, we believe that it is important to focus on this condition in future research.

Declaration of Competing Interest

None.

<https://doi.org/10.1016/j.autrev.2019.06.002>

Received 6 April 2019; Accepted 12 April 2019

Available online 07 June 2019

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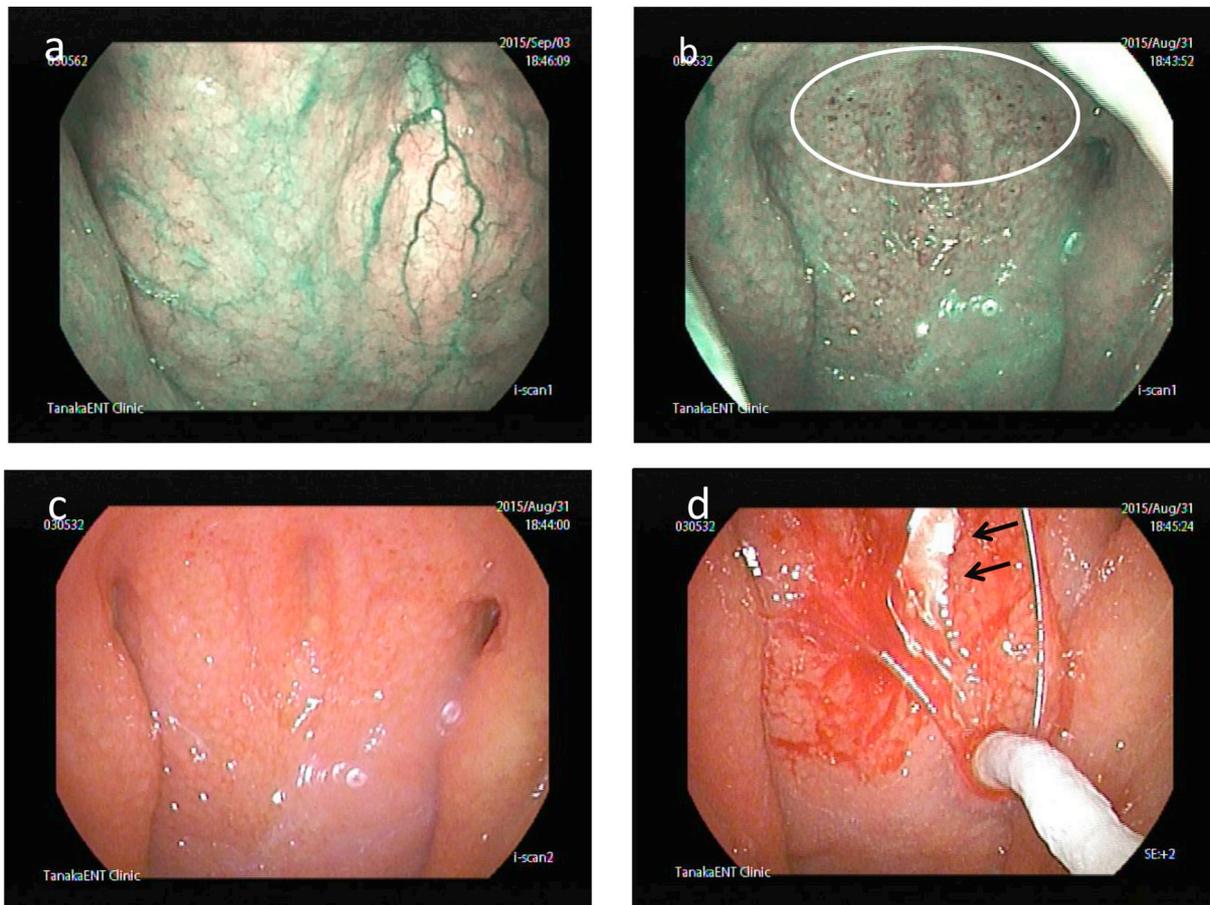


Fig. 1. Endoscopic findings for the epipharynx in a healthy individual (a) and a representative case of IgA nephropathy (b, c, d). The vasculature was clearly recognized on image-enhanced mode using band-limited light (a). In contrast, the vasculature was not apparent owing to submucosal edema and congestion (b), and petechiae were present (white circle). It was prone to bleeding by abrasion with a cotton swab, and drainage of a submucosal pyocele was observed (arrows, d).

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