

Transient Filiform Papillitis in a Child

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Dear Editor:

The tongue is covered with many papillae, and these papillae primarily consist of the fungiform and filiform types. Histologically, filiform papillae show finger-like projections, and they have a core of loose connective tissue covered with keratinized stratified squamous epithelium, whereas fungiform papillae are round and covered with lightly or non-keratinized stratified squamous epithelium¹. Transient lingual papillitis (TLP) is an inflammatory disorder that has a clinically abrupt onset of pain, rapid disappearance of papules on the tongue, and inflammatory cell infiltration with some ulcerations on the fungiform papillae that is observed on histopathological examination². Herein, we describe a child showing clinical TLP features but the histopathological findings indicated primary involvement of filiform rather than fungiform

papillae. An 8-year-old Korean healthy boy presented with a 1-day history of asymptomatic papules of the tongue. Physical examination revealed diffuse erythematous papules prominently observed on the lingual papillae on the dorsal surface of the tongue (Fig. 1). Biopsy showed tapered finger-like projections covered with keratinized stratified squamous epithelium, suggesting the involvement of filiform rather than fungiform papillae. Acanthosis, papillomatosis, and parakeratosis with sparse lymphocytic inflammatory cell infiltration in the lamina propria were noted (Fig. 2). To rule out herpes simplex virus (HSV) infection, polymerase chain reaction (PCR) was performed



Fig. 1. Multiple erythematous papules on the dorsal surface of the tongue.

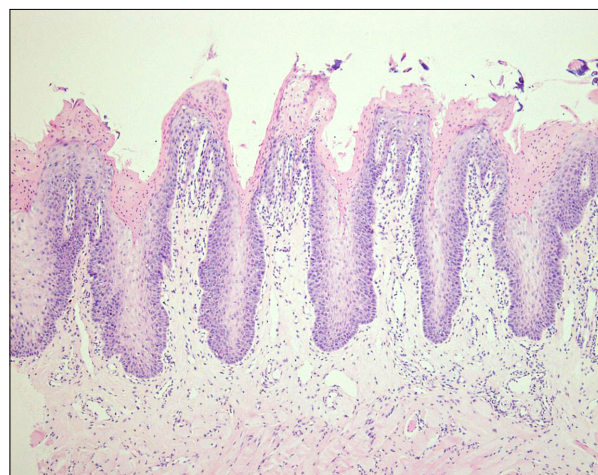


Fig. 2. Finger-like projecting structures covered with keratinized squamous epithelium exhibiting filiform papillae and sparse lymphocytic inflammatory cell infiltration in the lamina propria (H&E, $\times 100$).

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for amplification of a subunit of the deoxyribonucleic acid polymerase gene, by using an HSV Type 1/2 PCR kit (Bio-Core Inc., Seoul, Korea); negative results were obtained. After 14 days, the patient's parents reported that the lingual papules had cleared after a few days without any sequelae. From that time, the patient has occasionally developed papules on the tongue followed by spontaneous improvement. The final diagnosis was difficult to make because although his clinical progression was similar to asymptomatic TLP, the histological findings primarily involved filiform papillae, which exhibited a lesser extent of inflammation in contrast to the inflammatory and ulcerated changes that are associated with fungiform papillae in TLP. TLP progresses transiently because the pain subsides within a few days, and it is referred to as 'lie bumps' owing to its characteristics^{2,3}. Recently, some authors reviewed 9 patients who showed long-duration adult-onset papillitis and termed this condition 'chronic lingual papulosis (CLP)'⁴. CLP represents multiple asymptomatic but enlarged lingual papules that microscopically exhibit dense, fibrous, hyperplastic filiform papillae. The present case was distinct from CLP in that the age of onset was much younger, the clinical course was transient, and our patient had no underlying lingual or oral abnormalities. It also showed some features of TLP and some characteristics of CLP. Although abrupt onset and rapid disappearance of tongue papules are clinical features of TLP,

the signs of filiform papillae involvement with less extent of inflammatory cell infiltration observed on histological examination were indicative of CLP. In the present report, we introduce an interesting case of lingual papules characterized by an abrupt onset followed by the rapid disappearance of lingual papulosis with microscopic features of filiform papillitis. We believe that this case can be proposed as a new disease entity, specifically a filiform-involving lingual disorder, if similar cases are subsequently reported.

REFERENCES

1. Mescher AL. Chapter 15. Digestive tract. In: Mescher AL, editor. Junqueira's basic histology: text & atlas. 12nd ed. New York: McGraw-Hill, 2010.
2. Whitaker SB, Krupa JJ 3rd, Singh BB. Transient lingual papillitis. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 1996;82:441-445.
3. Roux O, Lacour JP; Paediatricians of the Region var-Côte d'azur. Eruptive lingual papillitis with household transmission: a prospective clinical study. *Br J Dermatol* 2004; 150:299-303.
4. Bouquot JE, Adibi SS, Sanchez M. Chronic lingual papulosis: new, independent entity or "mature" form of transient lingual papillitis? *Oral Surg Oral Med Oral Pathol Oral Radiol* 2012;113:111-117.