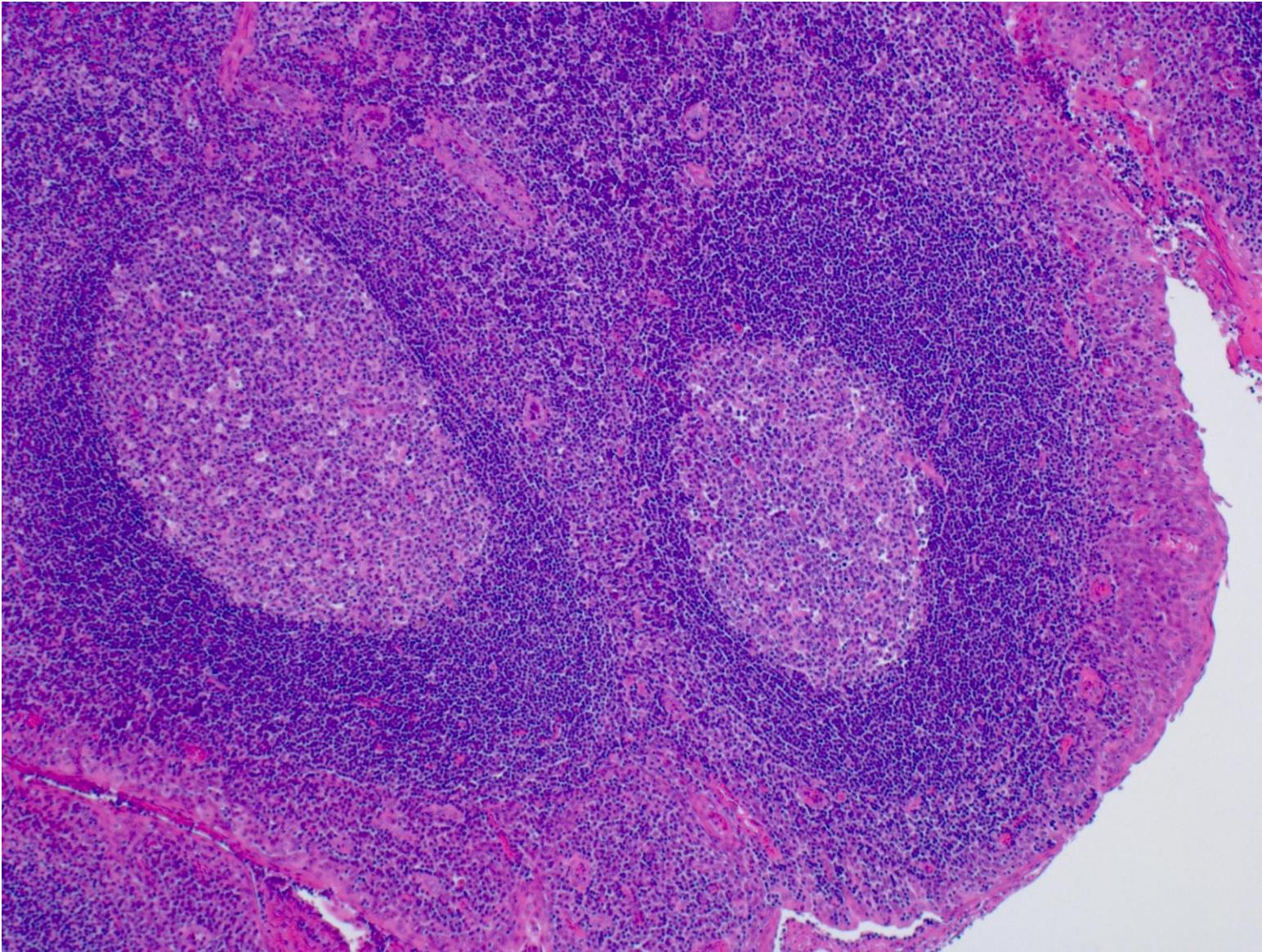


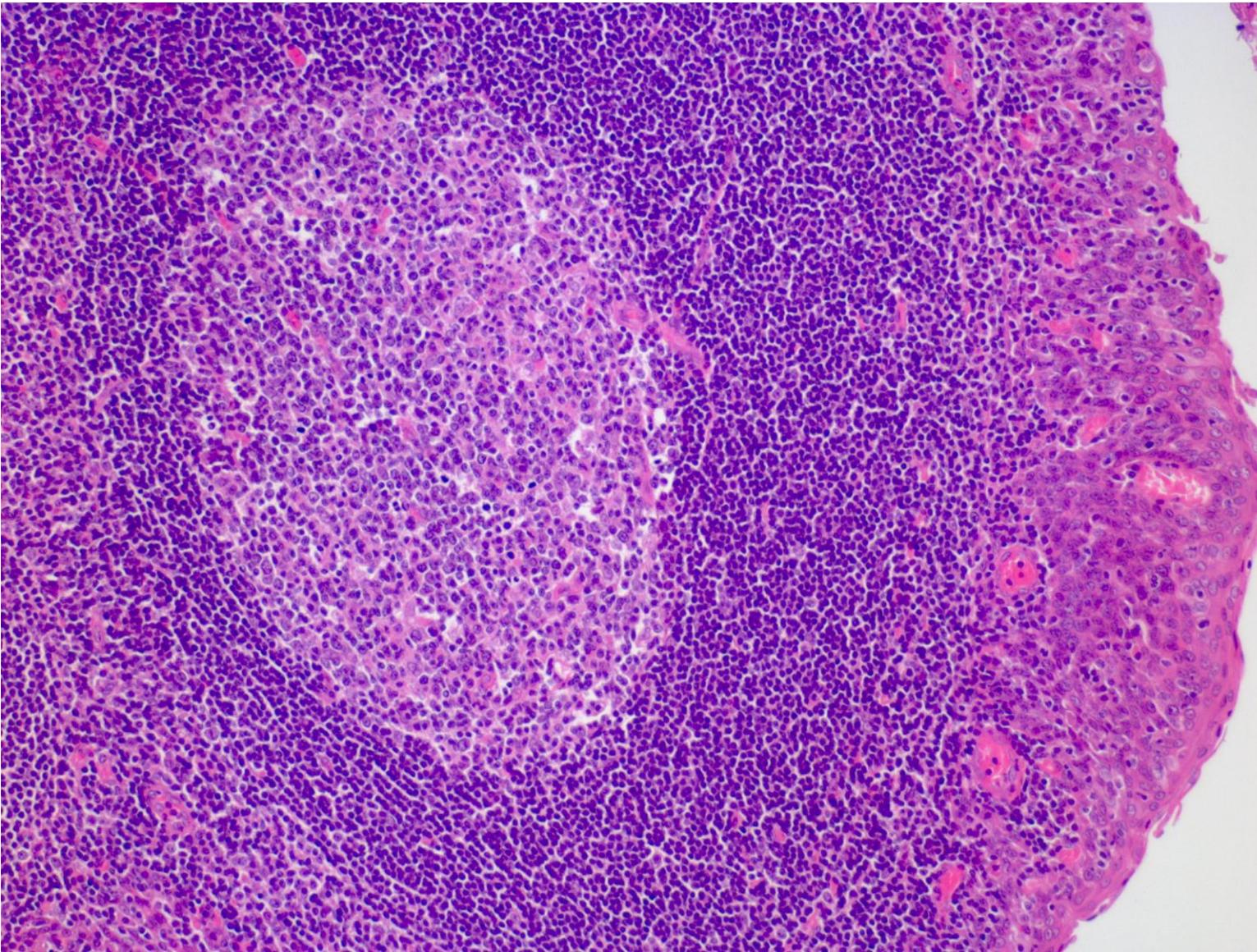
Tonsillectomy for treating IgA nephropathy

IgA nephropathy is common in Asian countries. Episodic macroscopic hematuria happens after upper respiratory tract infections, suggesting a relationship between IgA nephropathy and mucosal immunity. In Japan, tonsillectomy has been performed as a choice of treatment for IgA nephropathy. The role of tonsillectomy in managing IgA nephropathy remains unsettled. Reportedly, however, tonsillectomy may have a favorable effect on clinical remission and delayed renal deterioration in IgA nephropathy. Not only in patients with early-stage disease but also patients with higher levels of proteinuria and relatively severe pathological damage may show a positive effect.

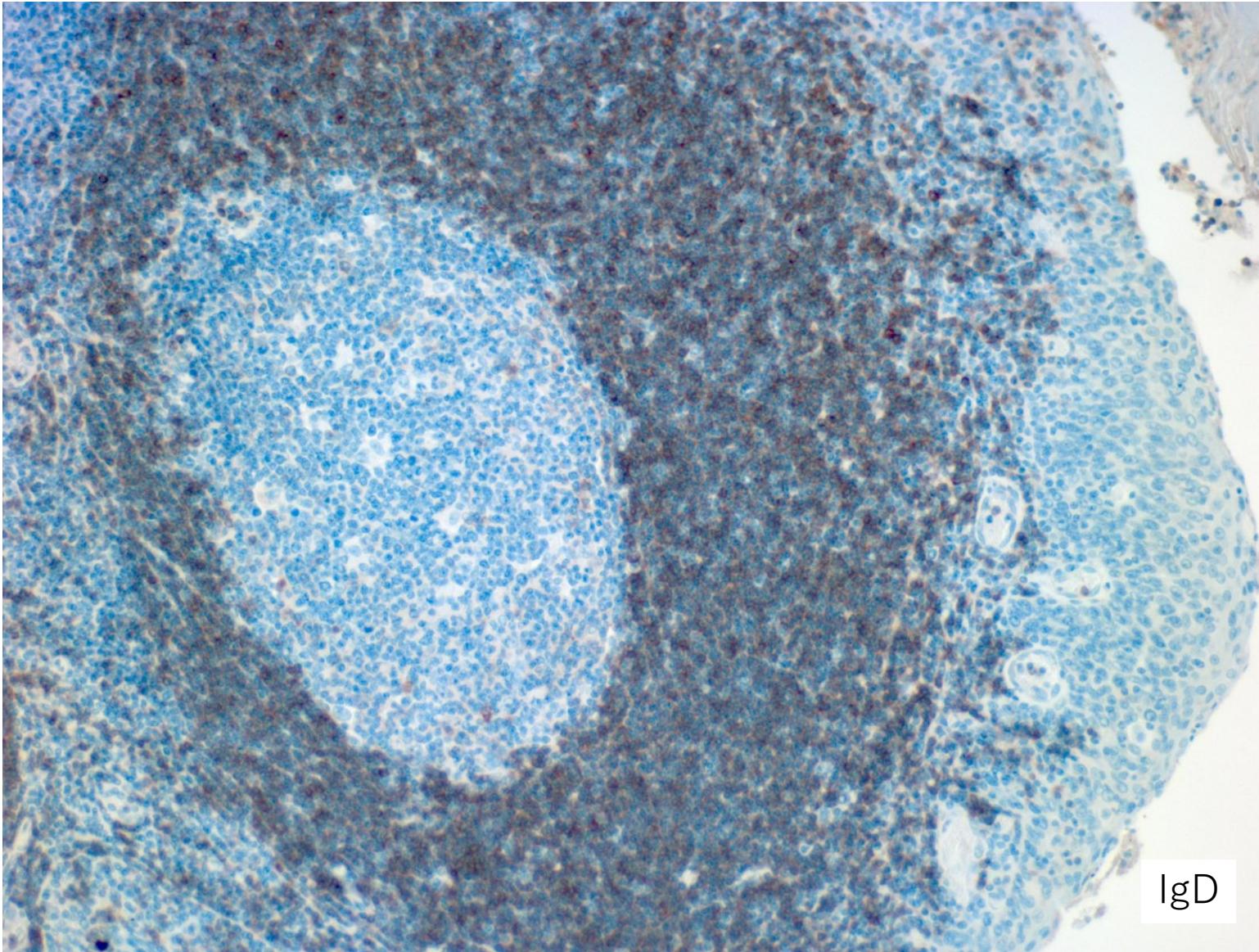
Ref.: Maeda I, et al. Tonsillectomy has beneficial effects on remission and progression of IgA nephropathy independent of steroid therapy. *Nephrol Dial Transpl* 2012; 27: 2806-2813. doi: 10.1093/ndt/gfs053



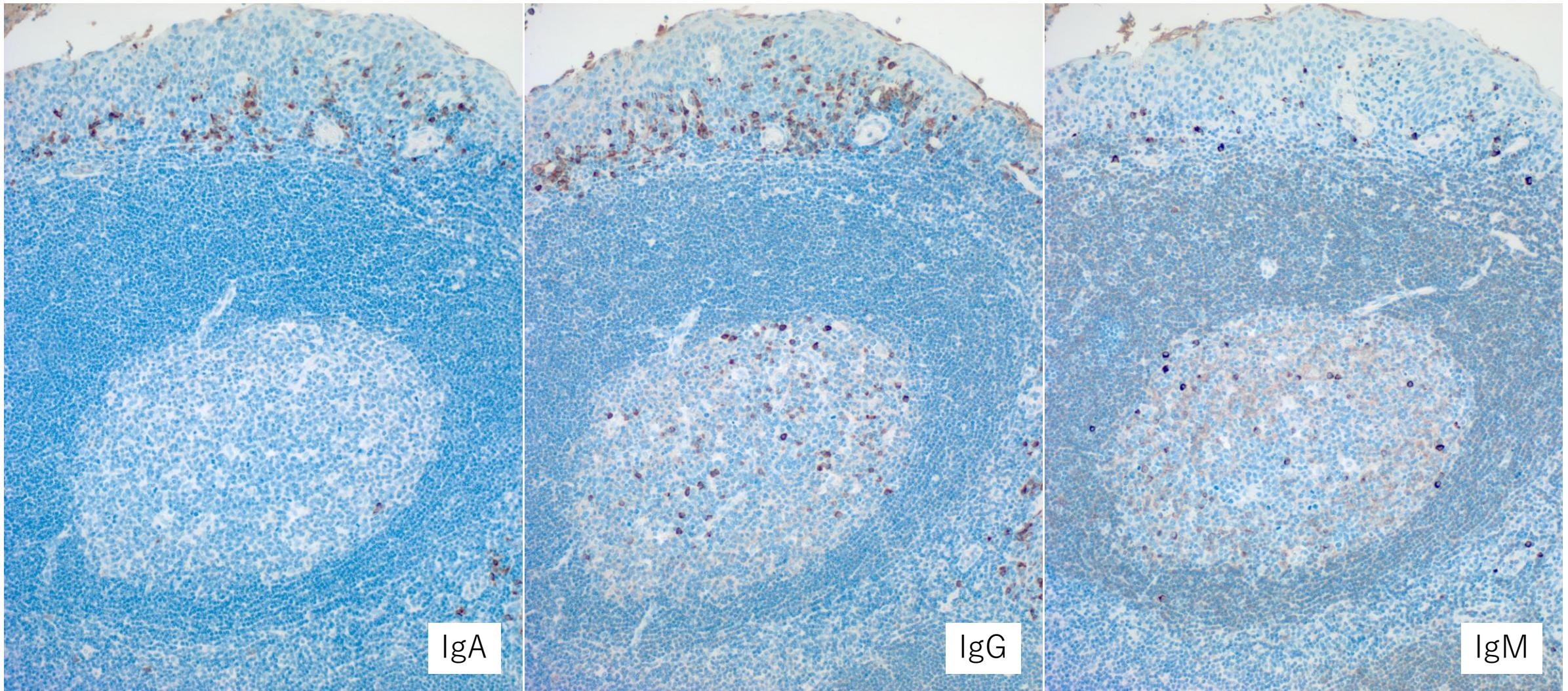
Tonsillectomy specimen for treating IgA nephropathy in a 26 y-o Japanese female patient. Lymphoid hyperplasia with enlarged germinal centers and the covering reticular mucosa with lymphoplasmacytic infiltration are observed (H&E-1).



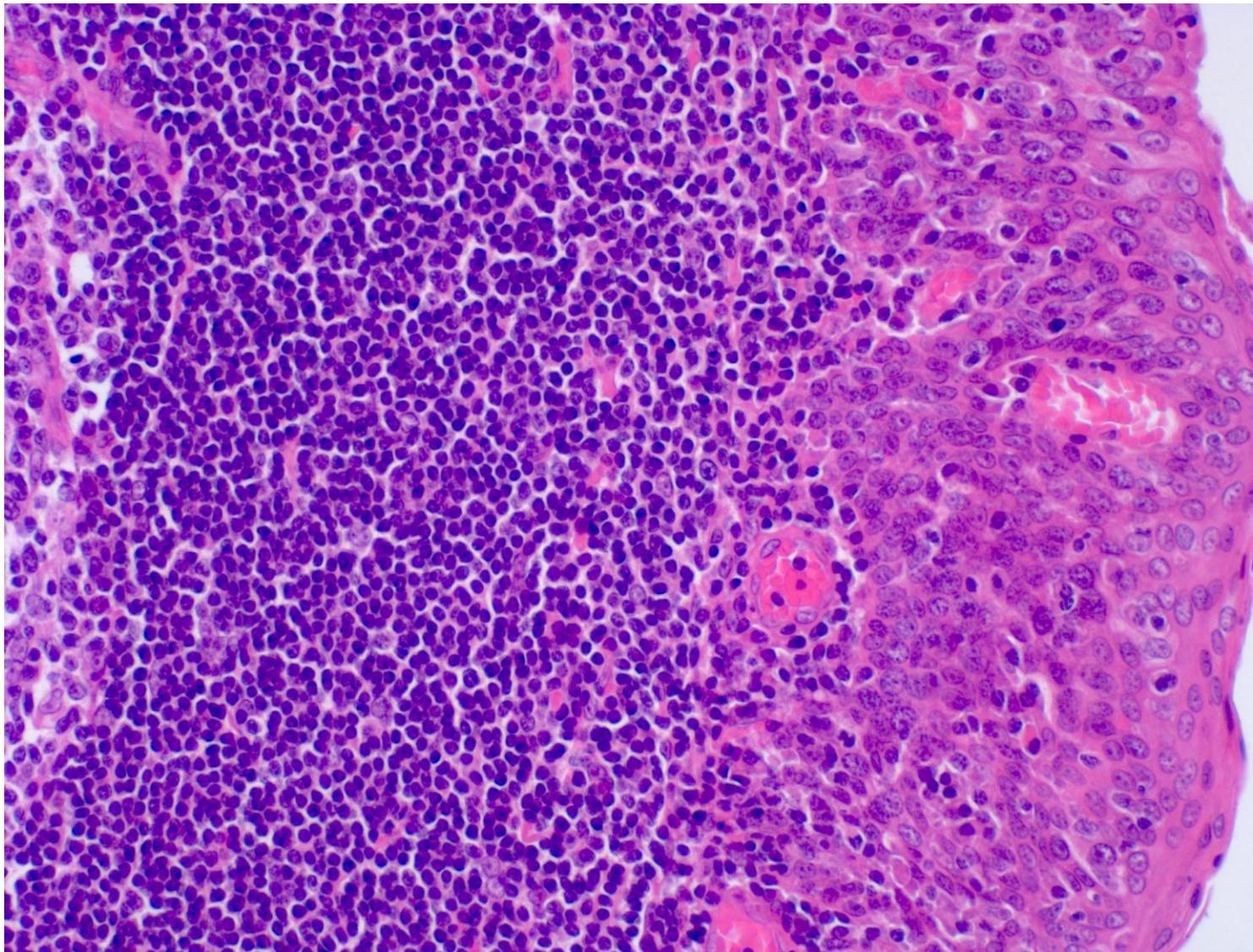
Tonsillectomy specimen for treating IgA nephropathy in a 26 y-o Japanese female patient. Lymphoid hyperplasia with enlarged germinal centers and the covering reticular mucosa with lymphoplasmacytic infiltration are observed (H&E-2).



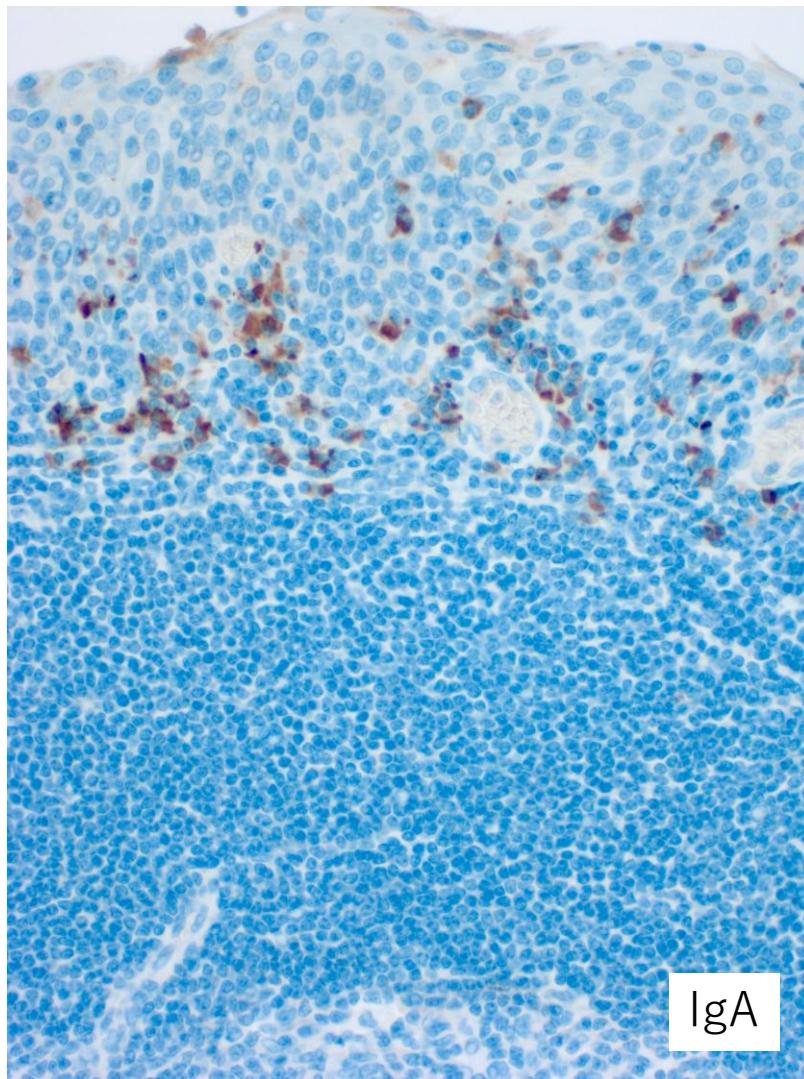
Tonsillectomy specimen for treating IgA nephropathy in a 26 y-o Japanese female patient. Lymphoid hyperplasia with enlarged germinal centers and the thickened mantle zone composed of IgD-positive B-lymphocytes are observed (immunostaining for IgD).



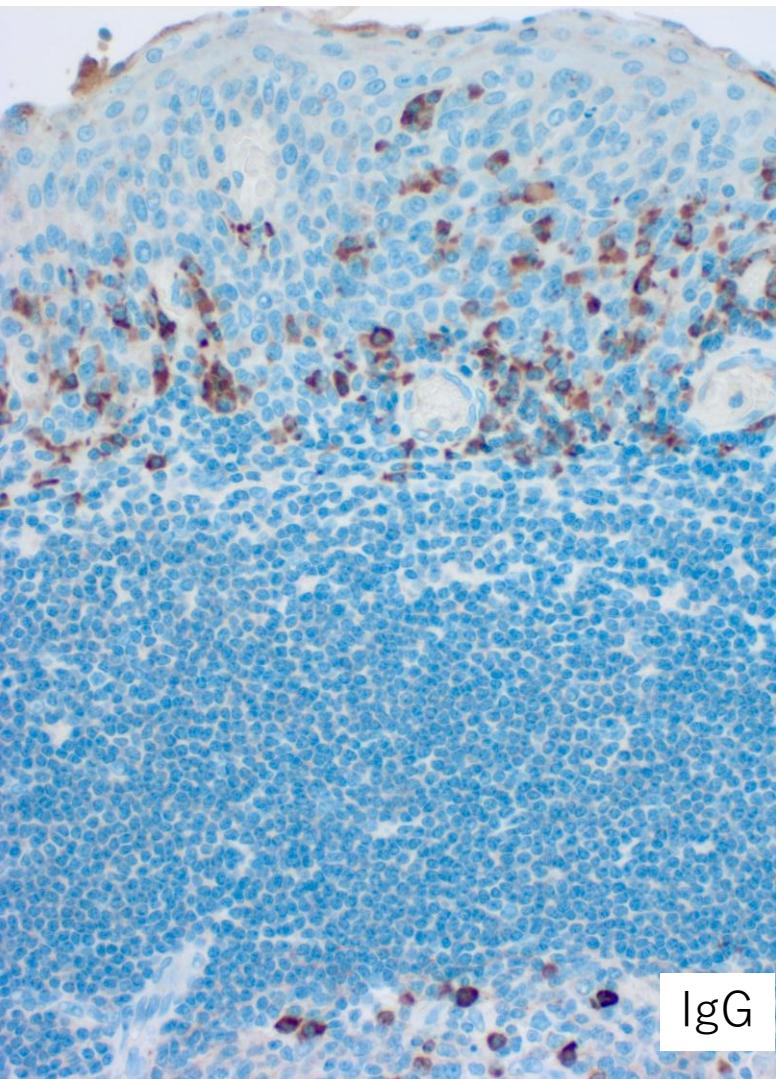
Tonsillectomy specimen for treating IgA nephropathy in a 26 y-o Japanese female patient. The enlarged germinal center contains germinocytes with IgG and IgM immunoreactivity, while the overlying reticular mucosa contains rich plasma cells with IgG > IgA > IgM immunoreactivities (immunostaining for IgA, IgG and IgM).



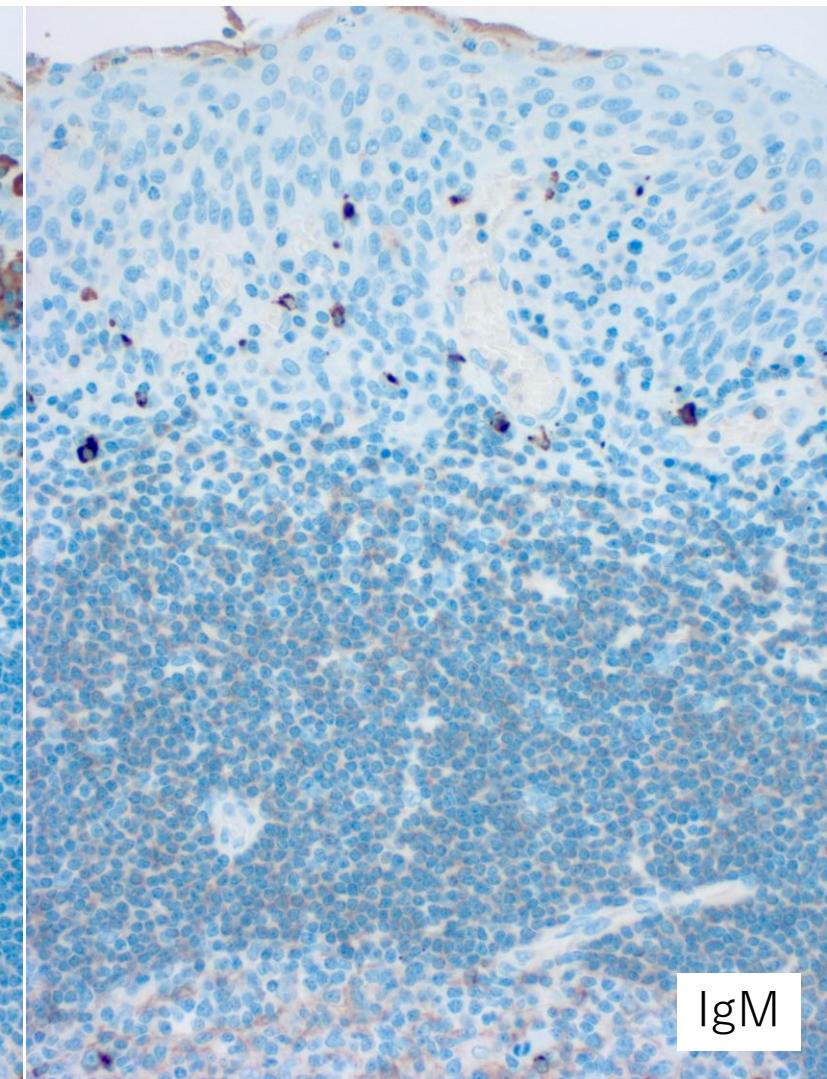
Tonsillectomy specimen for treating IgA nephropathy in a 26 y-o Japanese female patient. Lymphoid hyperplasia with enlarged germinal centers and thickened mantle zone is covered with reticular mucosa with lymphoplasmacytic infiltration (H&E-3).



IgA

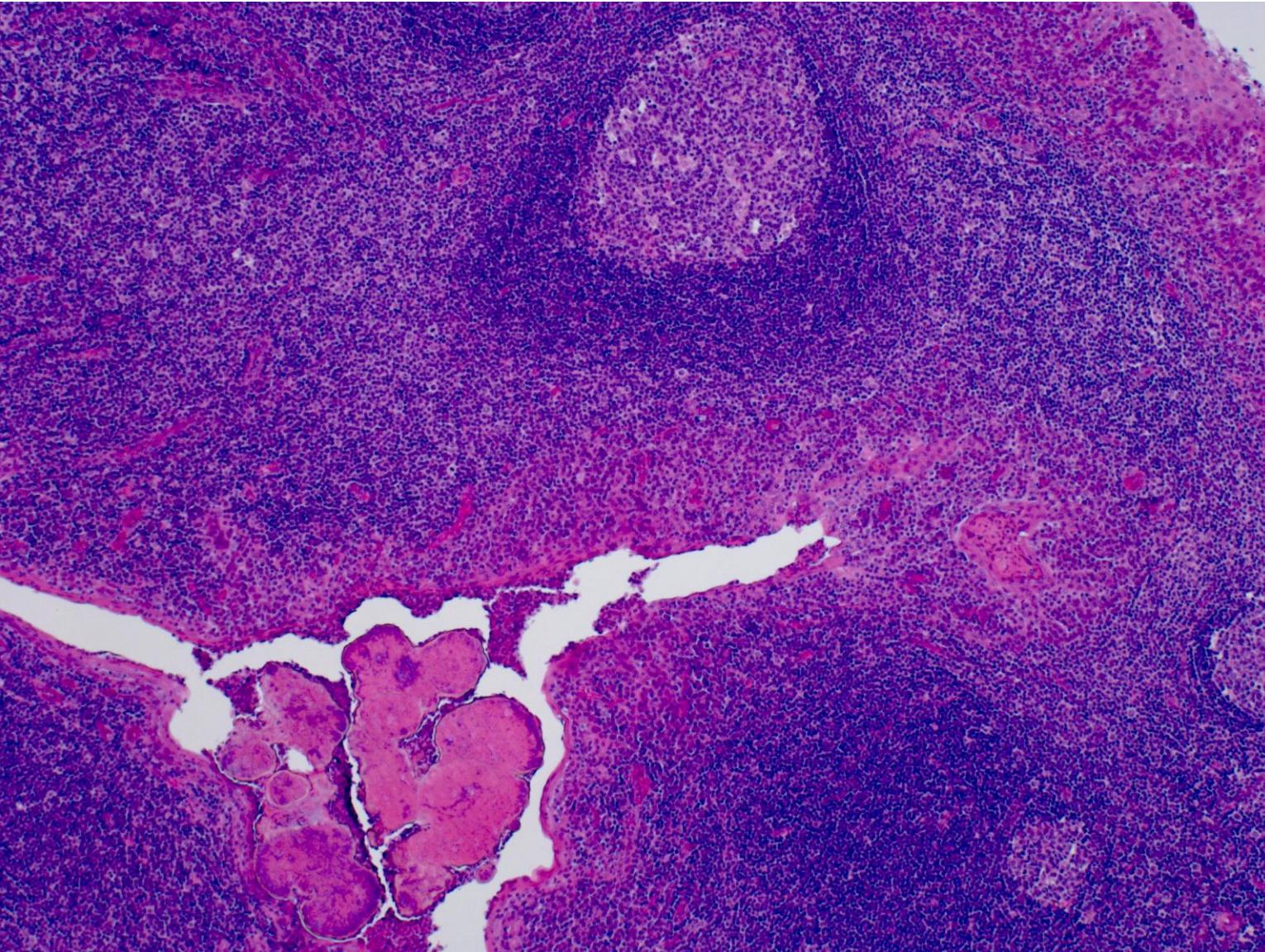


IgG

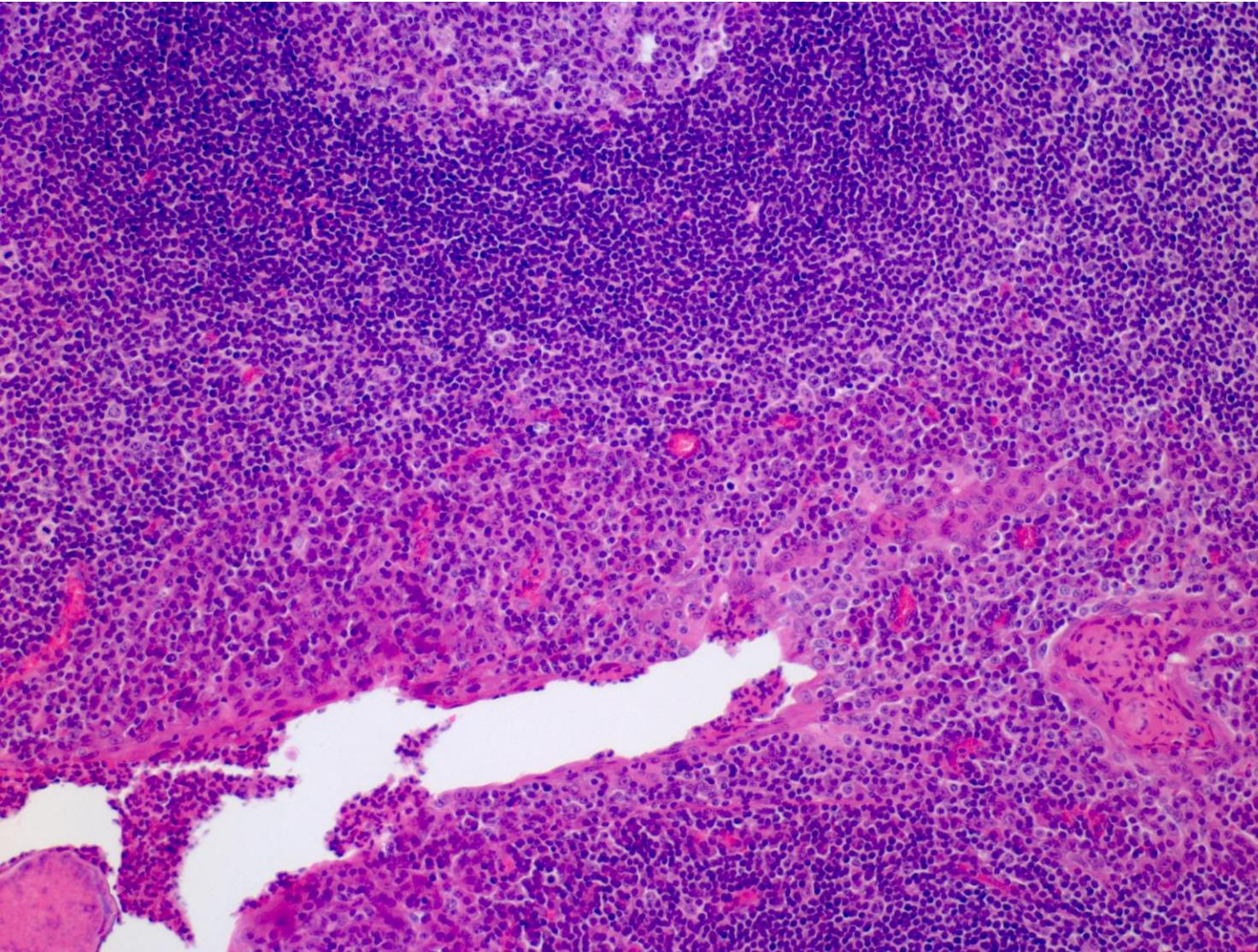


IgM

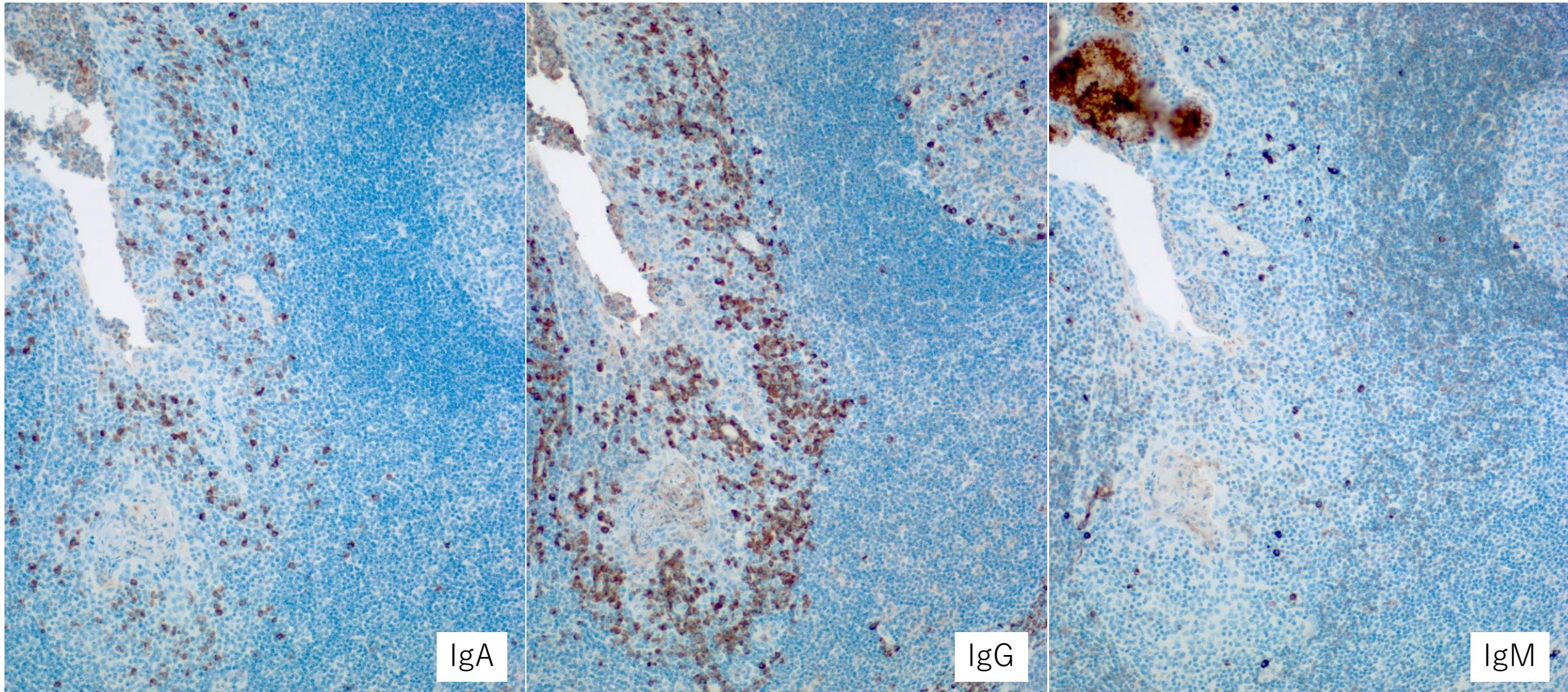
Tonsillectomy specimen for treating IgA nephropathy in a 26 y-o Japanese female patient. The reticular mucosa with lymphoplasmacytic infiltration contains plasma cells immunoreactive for IgG > IgA > IgM (immunostaining for IgA, IgG and IgM). The germinocytes show IgG > IgM immunoreactivities. The mantle zone lymphocytes reveal weak plasma membrane positivity for IgM.



Tonsillectomy specimen for treating IgA nephropathy in a 26 y-o Japanese female patient. Lymphoid hyperplasia with enlarged germinal centers and the covering reticular mucosa with lymphoplasmacytic infiltration are observed. Actinomycotic grains are noted in the tonsillar pit (H&E-4).



Tonsillectomy specimen for treating IgA nephropathy in a 26 y-o Japanese female patient. Lymphoid hyperplasia with enlarged germinal centers and the covering reticular mucosa with lymphoplasmacytic infiltration are observed (H&E-4).



Tonsillectomy specimen for treating IgA nephropathy in a 26 y-o Japanese female patient. The reticular mucosa with lymphoplasmacytic infiltration contains plasma cells immunoreactive for IgG > IgA > IgM (immunostaining for IgA, IgG and IgM). The germinocytes show IgG > IgM immunoreactivities. The mantle zone lymphocytes reveal weak plasma membrane positivity for IgM.