Background: Granulomatosis with polyangiitis (GPA) mainly involves the upper and lower respiratory tracts and kidneys and induces necrotising vasculitis and granuloma. Nasal biopsy has been recommended in GPA-suspected patients to not only completely cure chronic rhinosinusitis, but also clearly discriminate its aetiologies.

Objectives: We investigated whether the classification of GPA could be made without nasal biopsy in immunosuppressant drug-naïve 45 patients with chronic rhinosinusitis who had previously been classified as GPA.

Methods: We retrospectively reviewed the medical records of 45 patients with GPA. Twenty-six patients exhibited chronic rhinosinusitis, among which 16 patients underwent nasal biopsy (10 with granuloma and 6 without granuloma). We applied the 2007 European Medicines Agency algorithm for the classification of GPA, the 2012 Chapel Hill Consensus Conferences Nomenclature of Vasculitis and the 2017 American College of Rheumatology/European League Against Rheumatism provisional classification criteria for GPA to them for reclassifying GPA. (Figure1)

Results: The mean age was 58.4 years and 17 patients were men. There were no differences in clinical and laboratory results between those with and without granuloma. Among 6 patients without granuloma on nasal biopsy, 3 patients with only chronic rhinosinusitis could be classified as GPA due to GPA-specific lung lesions. Among 9 patients without nasal biopsy, 3 patients with only chronic rhinosinusitis could be classified as GPA due to GPA-specific lung lesions and cartilaginous involvement. (Table 2)

Conclusions: Nasal biopsy is necessary and useful for classifying GPA. However, nasal biopsy could be replaced with PR3-ANCA (or C-ANCA) positivity, GPA-specific lung lesions and cartilaginous involvement in GPA suspected patients with chronic rhinosinusitis.

REFERENCES: