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The spectrum of monoclonal gammopathy of clinical significance (MGCS) has continued to expand in recent years, with new disease entities being recognized and proposed.[1] In their Perspective published in *Haematologica*, Fotiou et al. proposed the concept of monoclonal gammopathy of bleeding significance (MGBS), incorporating bleeding phenotypes caused by direct interference of the M-protein with hemostatic pathways into the MGCS spectrum.[2] Among these, thrombocytopenia directly attributable to the monoclonal immunoglobulin—which we have termed monoclonal gammopathy-related thrombocytopenia (MGRT)—was previously proposed by our group as a distinct disease entity [3]. We take this opportunity to expand on the relevant content.

The clinical presentation of MGRT shows several notable shared features. Among the 11 cases of MGUS with immune thrombocytopenia identified in our own patient and in the literature, there were 7 men and 4 women, with a median age of 67.6 years; IgG was the most common immunoglobulin type (8 cases), followed by IgM (2 cases) and IgA (1 case). Most patients presented with severe thrombocytopenia requiring pharmacological intervention, and only a few had mild platelet reduction that was left untreated. Bone marrow examination usually showed normal or increased megakaryocytes, similar to classical ITP. The treatment response pattern, however, resembled that of refractory ITP: in nearly all patients treated with glucocorticoids, platelet counts could not be sustained during dose tapering. We therefore suggest that monoclonal immunoglobulin testing be included in the workup of refractory ITP.

Our article also summarized 13 cases of multiple myeloma with ITP. Thrombocytopenia occurred either at the onset of myeloma or after treatment. As with MGRT, most of these cases responded poorly to glucocorticoids, with platelet counts falling during tapering or no response at all. [3]

Beyond glucocorticoids, other approaches reported in the literature include danazol, thalidomide, rituximab, splenectomy, and TPO receptor agonists, with variable results. Notably, platelet counts improved in some cases after therapy directed at the B-cell or plasma-cell clone. For example, Naka et al. reported a patient with IgM MGUS and refractory immune thrombocytopenia who responded to tirabrutinib combined with conventional therapy.[4]

Several questions remain unresolved. First, there are no large-scale epidemiological data. Existing evidence is limited to case reports and small case series [5], and the exact proportion of MGRT among the MGUS population, its annual incidence, and its risk of progression to symptomatic myeloma remain unclear. Second, the molecular pathogenesis is poorly understood. Whether the M-protein directly targets platelet membrane glycoproteins or indirectly mediates platelet clearance through immune complexes has not been systematically studied, and the positivity rate and diagnostic value of routine antiplatelet antibody testing in MGRT remain to be assessed. Third, effective treatment strategies have yet to be established. Glucocorticoid monotherapy does not sustain responses; whether TPO receptor agonists, although capable of raising platelet counts, can alter the natural history of the disease is uncertain; and the indications, regimen selection, and response criteria for clone-directed therapy all require prospective study. Fourth, some patients may have MGUS and ITP coexisting independently, with the monoclonal immunoglobulin not contributing to the thrombocytopenia. Such cases must be distinguished from true MGRT, as misclassification would lead to an incorrect understanding of the disease and inappropriate treatment decisions. At present, no reliable laboratory marker or assay can differentiate the two, and better methods capable of confirming or excluding a pathogenic role of the M-protein are

urgently needed.

Finally, regarding nomenclature: following the MGCS convention, the term "monoclonal gammopathy of thrombocytopenic significance" could be used. However, its abbreviation, MGTS, is identical to that of "monoclonal gammopathy of thrombotic significance," which would cause serious confusion in literature retrieval and academic communication. By contrast, "monoclonal gammopathy-related thrombocytopenia" (MGRT) accurately describes the pathological relationship and avoids the conflict in abbreviation, making it more suitable for recognition and dissemination of this emerging entity in the hematology community.

References

1. Ríos-Tamayo R, Paiva B, Lahuerta JJ, López JM, Duarte RF. Monoclonal gammopathies of clinical significance: a critical appraisal. Cancers (Basel). 2022;14(21):5247.
2. Fotiou D, Antic D, Delluc A, et al. Diagnostic and therapeutic challenges in rare hematologic entities: monoclonal gammopathy of thrombotic and bleeding significance. Haematologica. 2026;111(10):3248-3257.
3. Su Z, Liu X, Yu X. Monoclonal gammopathy-related thrombocytopenia: Case report and literature review. Int J Rheum Dis. 2024;27(12):e15388.
4. Naka R, Kaneko H, Nagata O, et al. Refractory immune thrombocytopenic purpura associated with IgM monoclonal gammopathy of undetermined significance: successful treatment with tirabrutinib plus conventional therapies. EJHaem. 2022;3(2):513-516.
5. Rossi D, De Paoli L, Franceschetti S, et al. Prevalence and clinical characteristics of immune thrombocytopenic purpura in a cohort of monoclonal gammopathy of uncertain significance. Br J Haematol. 2007;138(2):249-252.