Appearance of Thrombocytopenia and Benign Monoclonal Gammopathy following Intake of Drugs

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The association of benign monoclonal gammopathy (BMG) and thrombocytopenia is quite uncommon [1], as is the association between monoclonal gammopathy and drug intake [2, 3]. We herewith report on 2 patients with an anamnesis of drug intake, in whom BMG and long-standing thrombocytopenia appeared.

Case Reports

Patient 1. An 80-year-old woman was referred because of the appearance of diffuse ecchymoses. Her past history was unremarkable except for the fact that 3 months prior to hospitalization she was treated with dipyrone 2 g/day and indomethacin 200 mg day for 3 weeks because of generalized musculoskeletal pains. Peripheral blood counts as well as serum protein electrophoresis prior to administration of these drugs were normal. Physical examination was normal except for diffuse ecchymoses. Hemoglobin was 14 g/dl, white blood cells 8,000/µl with a normal differential count and the platelets were 5,000/µl. ESR was 20/35 mm. The tests for the presence of thromboagglutinins, Coombs’, anti-nuclear factor, LE cells, Rose-Waaler and latex were all negative and the complement concentrations were within normal limits. Bone marrow biopsy revealed mild increase in the lymphocytes and a normal number of inactive megakaryocytes. Liver and spleen scintiscans were normal. Serum protein electrophoresis revealed an M component which was identified as monoclonal IgGκ. There was no evidence for multiple myeloma. Treatment for 2 months with prednisone 30 mg/day and 1 mg of vincristine at monthly intervals were of no avail. The patient is closely followed for 4 years, however, a change in her clinical or laboratory data was not noted.

Patient 2. A 63-year-old man was admitted because of thrombocytopenia of 10,000/µl. His past history was unremarkable. 2 months prior to his admission he received ampicillin 2 g/day and aspirin 1 g/day for 10 days, because of acute bronchitis. Peripheral blood count as well as serum protein electrophoresis prior to drug intake were normal. Physical examination was normal; there were neither petechiae nor ecchymoses. Hemoglobin was 13.2 g/dl and white blood cells 4,500/µl. The routine laboratory investigations, as detailed in the first case report, were within normal limits. Serum electrophoresis revealed an M component identified as IgG2. Bone marrow biopsy revealed a few inactive megakaryocytes. During a follow-up period of 5 years his platelet count fluctuated between 15,000 and 25,000/µl. He got no specific treatment and there were no hemorrhagic manifestations.
Discussion
The presence of thrombocytopenia in patients with monoclonal gammopathy is uncommon and remains unexplained [1]. It is known that viral infections as well as drug intake may cause thrombocytopenia or monoclonal gammopathy [2, 3]. It may be assumed that the above-mentioned causes could be the etiologic factors for these findings in our patients; nevertheless, the possibility that there is a causal relationship between monoclonal gammopathy and thrombocytopenia remains open.

References