Anaphylactic-Like Syndrome in Systemic Mastocytosis Treated with Alpha-2-Interferon

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Systemic mastocytosis (SM) is a rare neoplastic disease with an invariably fatal outcome within 2 years. At present, there is no effective chemotherapy, while antihistamines and disodium cromoglycate are usually employed to relieve the characteristic vaso-motor symptoms frequently complicating SM clinical course and determined by the release of mast-cell vasoactive substances. Anecdotal reports have described a partial remission in SM with interferon-γ [1, 2]. This experience as well as the probable myeloproliferative origin of the disease [3], encouraged us to employ α2-interferon (α2-INF) in a 69-year-old woman with severe pancytopenic SM who had previously been unsuccessfully splenectomized. The α2-INF schedule was a progressive weekly dose of 3–6–9 million IU/day subcutaneously. A few hours after the first α2-INF injection, the patient suddenly became hyperpyretic (40 °C), a bronchospasm, explosive diarrhea, flushing, tachycardia and hypotension appeared although premedication with H1 and H2 antihistamines, oral sodium cromoglycate and paracetamol had been administered. The recurrence after subsequent α2-INF injections of this ana-phylactic-like syndrome, which had previously occurred with minor severity and frequency in this patient, did not allow us to use a daily α2-INF dose higher than 6 million IU. It should be noted that the patient had had infrequent and moderate episodes of bronchospasm and diarrhea since the onset of the SM. Moreover, bronchospasm, diarrhea, flushing and hypotension are infrequent side effects of INF therapy. In this SM case, however, these symptoms were very similar to those occurring during the untreated course of the disease. We believe that this anaphylactic-like syndrome might have been caused by massive degranulation of proliferating mast cells apparently due to α2-INF activity.

References
