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 α 2-interferon (α 2-INF) in a 69-year-old woman with severe pancytopenic SM who had previously been unsuccessfully splenectomized. The α 2-INF schedule was a progressive weekly dose of 3–6–9 million IU/ day subcutaneously. A few hours after the first α 2-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 α 2-INF injections of this anaphylactic-like syndrome, which had previously occurred with minor severity and frequency in this patient, did not allow us to use a daily α 2-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 α 2-INF activity.

References

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