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Caso clínico

The role of post-autograft maintenance therapy in multiple myeloma: A propos d´un cas

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RESUMEN

Se reporta el caso de una paciente con mieloma múltiple a quien se le hizo trasplante de células hematopoyéticas autólogas después de haber logrado la remisión con talidomida-dexametasona. Cuando ya no recibía tratamiento de mantenimiento postrasplante, la paciente tuvo una recaída del mieloma 28 meses después del trasplante. Después de conseguir la segunda remisión con talidomida-dexametasona, la paciente fue retrasplantada con el mismo esquema, pero sin tratamiento de mantenimiento postrasplante, con talidomida 100 mg al día. La paciente permanece en remisión completa estricta sostenida 55 meses después del segundo trasplante. La mayor parte de los estudios que analizan la utilidad de la talidomida como mantenimiento postrasplante suponen comparaciones entre pacientes que reciben o no la talidomida. Este caso muestra, en una misma paciente, que la talidomida indicada como mantenimiento postrasplante ha sido capaz de evitar una nueva recaída y prolongar la supervivencia libre de enfermedad.
Palabras clave: myeloma múltiple, trasplante de células hematopoyéticas autólogas, talidomida-dexametasona.

ABSTRACT

The case of a patient with multiple myeloma is presented. She was autografted after achieving a complete remission and had a relapse while being followed without maintenance treatment 28 months after the graft. Once achieving a second remission she was re-autografted and subsequently given maintenance treatment with oral thalidomide, the patient remaining in a sustained stringent complete remission for a period of over 55 months. Information about the role of maintenance therapy in myeloma patients after achieving a remission stems mainly from trials comparing patients who have or not received thalidomide as maintenance therapy. Since the only difference between the two autografts was that in the second one maintenance with oral thalidomide was employed, this case clearly shows that it was the responsible for the long-lasting remission observed in the patient after the second autograft.
Key words: Multiple myeloma, post-autograft, maintenance therapy.

Nowadays, the best therapeutic approach for patients with multiple myeloma (MM) is high-dose chemotherapy rescued with autologous hematopoietic stem cell transplantation (SCT), once a remission of the disease has been achieved by using an immunomodulatory drug combined with dexametasone.[1-4] Ideally, only patients with a formal contraindication for autologous SCT should not receive this treatment. The role of maintenance treatment after autografting multiple myeloma patients is still under considerable debate; some authors consider that there are not enough data to recommend routinely maintenance therapy after autografting,[3] whereas others support that maintenance treatment prolongs both overall survival and relapse-free survival (RFS).[5-9]

Thalidomide is active in both newly diagnosed and relapsed or refractory multiple myeloma: its mode of action includes direct apoptotic, antiangiogenic effects and modulation of the bone marrow microenvironment.[5] These activities suggest that following induction therapy, either a consolidation block or maintenance therapy with thalidomide might reduce or suppress residual disease, thus prolonging the RFS and potentially the overall

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survival. Results of thalidomide maintenance trials are conflicting: following autologous SCT, thalidomide maintenance therapy has been associated with improved RFS in some studies[6-9] but not others[10] and an overall survival benefit has not been demonstrated consistently, although a meta-analysis has shown a trend toward improved overall survival.[11]

We present here the case of a lady with multiple myeloma who was autografted after achieving a complete remission and who had a relapse while being followed without maintenance treatment. After achieving a second complete remission she was re-autografted and subsequently given maintenance treatment with oral thalidomide, the patient remaining in a sustained stringent complete remission (sCR)[12] for a period of over 55 months. Since the only difference between the two autografts was that in the second one maintenance with oral thalidomide was employed, this case clearly shows that it was the responsible for the long-lasting remission observed in the patient after the second autograft.

CASE PRESENTATION

This 46 year old woman seeked for medical attention because of low back pain on December 2002. Laboratory work-up disclosed an IgG lambda monoclonal spike (4.2 g/dL), bone marrow infiltration by abnormal plasma cells, increased levels of beta 2 microglobulin (3.4 miU/mL), osteolytic lesions and normal serum albumin levels; the cariotype was normal and the investigation of deletion 13 by FISH was negative. With the diagnosis of ISS-III MM, the patient was treated with oral thalidomide (100 mg/day) and weekly oral dexamethasone (40 mg/week)[2] until the monoclonal spike dropped to 0.4 g/dL. At this point she was autografted using high-dose (200 mg/m^2) melphalan.[4] No maintenance treatment after the transplant was prescribed. Twenty eight months later, the M-component reappeared and the patient was treated again with oral thalidomide (100 mg/day) and weekly oral dexamethasone (40 mg/week). The monoclonal spike disappeared and at this point the patient was given a second autograft using the same conditioning regimen.[4] After the second autograft, she was prescribed oral thalidomide (100 mg/day), the monoclonal spike remaining undetectable and negative the immunofixation and normal the free light chain assay. The patient remains in a sustained sCR for over 55 months after the second autograft. The Figure 1 depicts the evolution of the monoclonal spike along treatment.

DISCUSSION

Thalidomide maintenance has the potential to modulate residual multiple myeloma after an initial response. It is not until recently that the role of maintenance in patients with multiple myeloma given high-dose therapy rescued with autologous stem cells has been defined.[5] Thalidomide maintenance significantly improves progression-free survival and can be associated with improved overall survival, mainly in patients with favorable prognosis.[5-9] In addition, overview analyses have demonstrated that thalidomide maintenance is associated with a significant late overall survival benefit.[5-11]

Information about the role of maintenance therapy in multiple myeloma patients after achieving a remission stems mainly from trials comparing patients who have or not received thalidomide as maintenance therapy.[5-10] The case that we present here clearly shows, in a same person, that the maintenance therapy was by itself able to maintain a sustained sCR and to prolong both the OS and the progression-free survival of the patient. This evidence further supports the role of maintenance therapy with thalidomide and possibly other immunomodulatory drugs[13] in patients with multiple myeloma after being treated with high-dose chemotherapy rescued with autologous stem cell support.

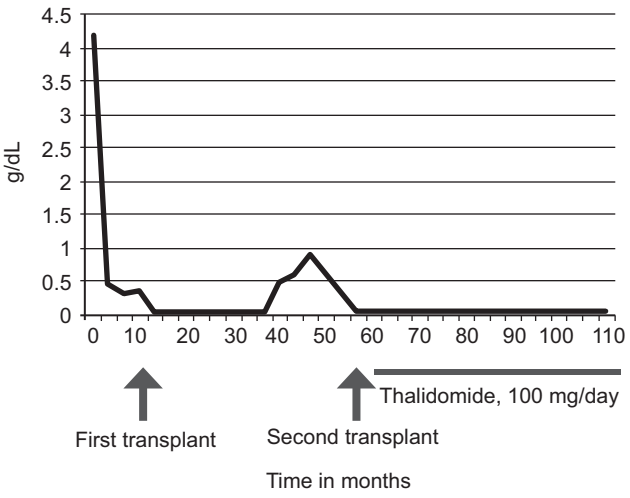

Figure 1. IgG lambda paraprotein along time in the patient

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