Successful Treatment and Durable Remission of HHV8-induced Kaposi Sarcoma and Multicentric Castleman's Disease under Valganciclovir in an HIV-negative Patient

Kerasia-Maria Plachouri[1], Chrysa Oikonomou[1], Angelos Sarantopoulos[2], Dimitra Koumoundourou[3], Sophia Georgiou[1], Theofanis Spiliopoulos[1]

1 Dermatology Department, University General Hospital of Patras, Greece
2 Haematology Department, University General Hospital of Patras, Greece
3 Pathology Department, University General Hospital of Patras, Greece

Introduction

Kaposi sarcoma (KS) is a proliferative disease associated with a Human-Herpesvirus-8 infection. HHV8 is also associated with other conditions, such as multicentric Castleman's disease (MCD). Popular therapeutic approaches to KS have traditionally been local treatments such as cryotherapy, radiation, excision etc, and systemic therapies, such as chemotherapy, antiretroviral or systemic immunomodulatory medication.

Materials and Methods

We present the case of a 75 year old patient with a KS and a HHV-8-associated MCD that showed complete remission of both conditions under treatment of valganciclovir.

Case Presentation

A 75-year old HIV-negative female patient presented in our department due to an indolent, violaceous plaque on her right forearm. The patient had a history of a recently diagnosed MCD and was currently under an ongoing hemato-oncologic investigation. A skin biopsy revealed findings compatible with KS (Figure 1), and positive immunostaining for HHV8 . Meanwhile, histopathology of an excised maxillary lymph node revealed simultaneous infiltration of both MCD and KS (Figure 2), as well as positive immunostaining for HHV8 (Figure 3).

Due to the presence of two HHV8-associated proliferative conditions, a systemic therapy with valganciclovir 450mg bid was initiated. The patient also received 4 cycles of a systemic R-CHOP regimen (Rituximab, Cyclophosphamide, Doxorubicine, Vincristine, Prednisone) repeated every 21 days, which, however, had to be interrupted due to serious complications. On the ground of a continuous MCD and KS activity, but due to the overall poor physical condition of the patient, chemotherapy was permanently interrupted and the monotherapy with valganciclovir 450 mg bid was continued. This resulted gradually in a complete remission of the lymphadenopathy within the next 21 months and improvement of the patients' blood abnormalities, while no other skin lesions were observed.

In the 3-years follow-up under valganciclovir treatment, the patient remains disease-free, with no sign of recurrence of either MCD or KS and with no adverse events due to the latter medication.

Histopathological Images

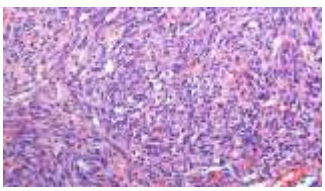

Figure 1: Histopathological image of Kaposi Sarcoma in a skin biopsy specimen

Figure 2: Histopathological image of KS and MCD in an excised maxillary lymph node specimen

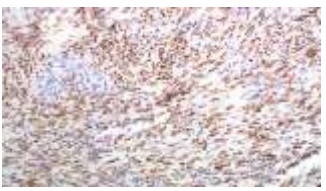

Figure 3: Immunohistochemistry of HHV-8 in excised maxillary lymph node specimen

Conclusions

Valganciclovir is a synthetic analogue of 2'-deoxyguanosine that inhibits replication of herpes viruses. Although the role of antivirals in the treatment of KS is not widely studied, preliminary data indicating an inhibitory effect of valganciclovir in HHV-8 replication, as well as a reduction in HHV-8 viraemia are present in the literature, thus implying a potential therapeutic benefit in KS patient.

In our case, whether the good therapeutic outcome is on the ground of valganciclovir alone, or due to a synergistic action of the ongoing valganciclovir therapy and a late-onset effect of the R-CHOP treatment, is under debate.

The fact that the patient remains disease-free regarding both conditions for such a considerable amount of time, and given the relatively high relapse rates of these two diseases, indicates that the strategy of a long-term HHV8 suppression with valganciclovir as an adjuvant treatment for KS is an approach with a good safety profile that can result in encouraging therapeutic outcomes.