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INFUSION OF DONOR LYMPHO CYTES IN LEUKEMIA PATIENTS RELAPSED AFTER BONE MARROW TRANSPLANTATION IS SUCCESSFUL IF T CELLS OF RECIPIENTS ARE OF DONOR ORIGIN

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Infusion of donor lymphocytes is increasingly used to treat patients with leukemic relapse after allogeneic bone marrow transplantation. Significant numbers of patients with chronic myeloid leukemia respond to this therapy, usually accompanied by graft-versus-host disease. Only a minority of patients with acute myeloid and no patients with acute lymphoid leukemia respond to donor lymphocyte infusion. Direct correlation of responsiveness with the absence of graft-versus-host disease suggests that infused lymphocytes are neither reactive to the leukemic cells nor to normal tissue of these patients. In an attempt to answer the question why some patients respond while others do not, we determined the genetic origin of T cells present in relapsed patients at the time of donor lymphocyte infusion. All patients who had T cells of donor origin, attained complete remission. In contrast, all but two patients with T cells predominantly of recipient origin failed to respond. T cells of responding patients showed cytoxicity in vitro against target cells of recipient origin including leukemic cells. T cells of nonresponding patients did not show cytoxicity in vitro against target cells of recipient origin. These findings demonstrate that the origin of T cells at the time of relapse is an important prognostic parameter. If T cells are of donor origin, complete remission occurs upon infusion of donor lymphocytes. This led us to hypothesize that autologous T cells of nonresponding patients may destroy infused donor lymphocytes, thus explaining treatment failure.

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THE RECOMBINANT GAMMA-INTERFERON AND RETROPLACENTARY POLYBOLIN IN SYSTEMIC VASCULITIS IMMUNOTHERAPY

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Clinically-immunologically 27 systemic vasculitis patients (SV) — were observed. In cultural immunologic investigation — their immunocompetent cells sensitivity to Gamma-interferon (GI) and retroplacentar polibolin (RP) — was estimated. Complex immunotherapy GI and RP — was applied to this patient group according to special schemes during one year. The control group made 10/2 patients with SV, who got traditional glucocorticoid therapy. The immunologic investigation — their immunocompetent cells sensitivity to Gamma-interferon (GI) and retroplacentar polibolin (RP) — was shown. In cultural immunologic investigation — their immunocompetent cells sensitivity to Gamma-interferon (GI) and retroplacentar polibolin (RP) — was estimated. Thus, the applied immunotherapy GI and RP — was successful. V. Chopyak.

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ADAPTIVE IMMUNOTHERAPY WITH RECOMBINANT HUMAN IL-2 (HuIL-2) AFTER AUTOLOGOUS STEM CELL TRANSPLANTATION (ASCT) FOR HIGH-RISK NEUROBLASTOMA (HR-NB)


Objectives. A phase I/II trial, with low doses of HuIL-2 over a prolonged period of time, was carried out. The aim of the study was to evaluate immunomodulatory effects induced by IL-2 and its potential role in milodification or control minimal residual disease (MRD) in NB after high dose chemotherapy (HDCT) followed by ASCT.

Patient and method. From 1992 to 2996, 25 pts with HR-NB (1 in III CR, 2 in II VGP, 2 in II CR, 13 in VGP, 7 in CR1) received HuIL-2 (Proleukin, Aldersleisne), after a median (min-max) time of 91 (43-153) days from ASCT. Treatment schedule consisted of 2 cycles of 24-iv x 5 days (2.4-6-8.8 MU/kg/d respectively) followed by 10 months and 6 bimonthly cycles of rHuIL-2 administered as 5 (2.4-4-4.5 MU/kg/d), for a total of 18 cycles.

Results. Were administered 27 cycles. Immunoanalytic analysis globally evidenced an increment of NK and activated T cells number. Iperipetin (2500) and tromboptaphosina (4500), were only the rHuIL-2 dependent toxicity observed during the iv or sc administrations. 1 pt stopped the therapy due to granulopenia, 1 pt prorated reduced iv dose due to feverish convulsions. 20/25 pts are alive and well with a median (min-max) follow-up of 10 (2-50) months. 52 pts relapsed with a median (min-max) time of 13 (6-41) months, only one of these pts died for PD, 35 months after ASCT. Overall EFS at 3 years was 33%.

Conclusion. Adaptive immunotherapy with low doses of rHuIL-2 is feasible and seems to be effective in inducing activated immuconponent cells proliferation and in controlling MRD after HDCT and ABMT in HR-NB. (Supp: by Association Italiana Neuroblastoma).

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INDUCTION OF SPECIFIC CYTOTOXIC T CELLS AGAINST LEUKEMIC CELL LINES USING DENDRITIC CELLS FROM CORD BLOOD CD34+

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IF T CELLS OF RECIPIENTS ARE OF DONOR ORIGIN

SUCCESSFUL INFUSION OF DONOR LYMPHO CYTES IN LEUKEMIA PATIENTS

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INFUSION OF DONOR LYMPHO CYTES IN LEUKEMIA PATIENTS RELAPSED AFTER BONE MARROW TRANSPLANTATION IS SUCCESSFUL IF T CELLS OF RECIPIENTS ARE OF DONOR ORIGIN

The investigation of combined therapy effectiveness of 25 patients with hemorrhagic vasculitis with hereditary injuries was carried out. Combined therapy interferon (Reasidor='Sasliter'), acetylcholin (Zovirax, Wellcome), placental immunoglobulin (Chopharm) were applied. The virologic diagnosis was carried out by method of direct immunofluorescence of smear — implants from place of injury and detection of antigen by MIAA, in 25 patients Herpes simple virus (HSV) — of A group, in 74—Varicelle zoster (VZ) - of B group. Everyday on 210, 0 X 5 grade — 10 days), reallones (1 mmol/mo3, 3 times — 8 days), placental immunoglobulin (25 mg/kg x once in 2 days — 20 days) contributed to more easy clinical flow. The abortive form was estimated in 64, 0% of A group and 47, 0% of B group. The main symptom — decrease was estimated in 62, 36 and 46, 8% in A and B groups correspondingly. The treatment, begun in prodromal period of herpes—positive patient with hereditary vasculitis was most effective and contributed to main disease stabilisation.