acceptable for use in one blood bag. Our mean nuclear cellularity was 5.44×10^6, but this could possibly be increased by raising the collected blood volume. Checking for the existence of transmissible diseases must be performed in the maternal blood, the IgG antibodies levels are very low or undetectable in the newborn. Positive serological results invalidate the UCB for transplant. The serological tests are repeated in the mothers 3-6 months after the birth.

In conclusion, the establishment of Cord Blood Centers/Banks could open new fields in the procurement of donors for transplantation.

Key words

Program umbilical cord blood, cord blood bank, umbilical cord blood, blood donors

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Incidence and prognostic significance of idiopathic thrombocytopenic purpura in patients with Hodgkin's disease in complete hematological remission

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Idiopathic thrombocytopenic purpura (ITP) is a frequent and well recognized complication of lymphoproliferative diseases (especially chronic lymphatic leukemia),[1] but it is an unusual and poorly documented disease in the acute phase (1-2%).[2] We report on two female patients out of 812 patients with Hodgkin's disease (HD) followed between 1970 and 1995 at the Institute of Hematology and Medical Oncology "Seràgnoli" in Bologna, who developed ITP unrelated to bone marrow failure, 26 and 15 months after achievement of complete hematologic remission from HD.

Case #1. A 22-year-old woman presented in May 1991 with fatigue, fever and adenopathy in the right supraclavicular region. A chest radiograph defined the presence of intrathoracic adenopathy. Supraclavicular lymph nodes' biopsy revealed HD of nodular sclerosing type. A full blood count revealed hematocrit 44%, leukocyte count 0.54×10^9/L and a normal platelet count, described as being normal from the smear. The patient was placed in stage IIB, and chemotherapy was begun in June 1991. She received 3 cycles of MOPP protocol and 3 cycles of ABVD regimen.[3] At the end of chemotherapy, she began radiotherapy, receiving a total of 36 Gy to the mediastinal area.[4] The patient achieved complete remission (CR) in February 1992. Over the next 24 months she remained well and numerous complete blood counts were normal. In June 1994 she suddenly noted extensive purpura and easy bruising; examination revealed only ecchymoses and petechiae. The spleen was not palpable and there was no clinical evidence of recurring HD. The hematocrit was 44.8%, leukocyte count was 4.8×10^9/L with a normal differential count and the platelet count 4.0×10^9/L. Posterior iliac spine bone marrow biopsy revealed marrow in which erythroid and myeloid maturation appeared normal. No granulomas, tumor cells or any increase in fibrous tissue were seen. Roentgenograms of the chest and abdomen were negative. The diagnosis of ITP was suspected, and a trial of corticosteroids was begun. After 30 days, the platelet count was normal and corticosteroids were stopped. Over the next 14 months the full blood count remained normal. In September 1995 she again noted ecchymoses and petechiae. The blood platelet count was 5.0×10^9/L and an ITP relapse was diagnosed. After steroid therapy for two months without evidence of increased platelets, splenectomy was performed.[5] The platelet count rose immediately after splenectomy and remained normal. After two months, an autoimmune hemolytic anemia (AHA) appeared and the patient achieved a partial remission after prednisolone therapy. To date, there is no evidence of HD or ITP relapse.

Case #2. In December 1993, a 29-year-old woman noted enlarged lymph nodes in her right supraclavicular region. Lymph nodes biopsy revealed nodular sclerosing type HD. CT scanning of the chest, abdomen and pelvis revealed lymph node involvement of the anterior mediastinum without involvement of bone marrow. The patient was placed in stage IIIA and chemotherapy was started in January 1994. She received 6 cycles of ABVD regimen.[3] After completing chemotherapy she received the scheduled

radiation therapy to the mediastinum (36 Gy). The patient achieved CR in February 1995. Over the next 14 months she remained well and in complete hematologic remission. In May 1996 she noted extensive ecchymoses and petechiae. Her hematocrit was 43.2%, leukocyte count 0.64×10^9/L and the platelet count 1.0×10^9/L. The spleen was not palpable and there was no evidence of HD relapse. A bone marrow biopsy revealed normal erythroid and myeloid maturation. The diagnosis of ITP was suspected and a trial of corticosteroids was begun. After 30 days the platelet count was normal (224×10^9/L) and corticosteroids were stopped. To date, the patient remains in complete hematologic (ITP) and HD remission. Although some studies have reported that the presence of ITP in HD patients could signify active lymphoma, especially with splenic involvement,[2] other reports have shown that ITP can occur in the absence of active HD,[6] and that the HD status is independent of the onset of ITP.

Our two patients did not have active HD when they developed ITP, and the development of ITP did not indicate subsequent relapse, supporting the hypothesis of two independent diseases with different onsets. Furthermore, as for primary ITP occurring in association with HD, so thrombocytopenic purpura also seems to respond to conventional therapy.[2] Both patients responded with a single course of oral prednisolone, but one relapsed after 15 months and splenectomy was necessary for CR.[5]

The recognition of a picture of ITP as a complication of HD could have important implications, as described by Doan and Bouroncle.[7] We suggest, therefore, that an occult HD should be considered in any patient who presents with thrombocytopenic purpura of the ITP type, and particularly in a patient known to have been previously treated for HD, where the ITP picture may signal the recurrence of lymphoma. It should be noted that we have also observed thrombocytopenic purpura in chronic myeloid leukemia (CML) during treatment with interferon-α.[8]

In conclusion, ITP associated with HD responds to therapy in a similar manner to that of primary ITP. Its presence seems to confer no prognostic significance,[9] although the possibility of localization of splenic HD disease[10] has to be considered.

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Bacteremia caused by CDC Group IV c-2 in a patient with acute leukemia

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Human infections due to CDC group IV c-2, a gram-negative bacillus, are rare. We describe a case of nosocomial bacteremia caused by this organism in a neutropenic patient with acute lymphoblastic leukemia and include a literature review of CDC group IV c-2 infection in patients with hematologic malignancies.

Human infections due to CDC group IV c-2, a gram-negative bacillus, have been recently reported.[1-8] Bacteremia caused by this organism is rare in patients with hematologic malignancies.[2,5,6,8]

We report here a case of septicemia caused by CDC group IV c-2 in a neutropenic patient with acute leukemia and review the literature on this entity (MEDLINE, National Library of Medicine, Bethesda, MD covering the years 1965-97).

A 71-year-old previously healthy woman was admitted to our hospital with a temperature of 37.4°C, dyspnea and pleuritic chest pain. The patient had a history of fatigue, weakness and weight loss of 10 kg over the three previous months. Physical examination revealed cutaneous pallor, shortness of