Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

because the air can cause an irregular distribution of photons leading to a heterogeneous and anisotropic distribution of radiation [4,9,10]. The local device is constituted by Plexiglas PMMA sheets which have a density equivalent to water (1.5 cm thick of the sheets above and 3 cm below the blood bag) (Fig. 1). The blood bags are irradiated with a beam of X6 MV energy photon, using a linear accelerator with a dose rate of 600 UM/min and for an open field size of 40/40 cm^2. The dose of 25 Gy was delivered by two opposite fields (anterior/posterior) to have an homogeneous dose distribution in the irradiated area. In order to evaluate our local experience in the irradiation of labile blood products, we perform retrospective study extended from May 2017 to March 2020, a total of 58 patients have been transfused by 197 irradiated labile blood products. The average age was 45 years [3–64], with a female predominance (60%). Patients included in our work were followed for hematology diseases: multiple myeloma in 60% ($n = 35$), lymphoma in 23% ($n = 13$), aplastic anemia in 7% ($n = 4$) and other hematological diseases in 10% ($n = 6$). The majority of irradiated blood products were platelets 58,9% ($n = 116$) essentially concentrated platelets (66%). During our study, no cases of acute or chronic GVHD were noted which confirms the efficacy and safety of our local technique.

The preliminary results of our experience encourage us to expand our practice and plan for allogenic bone marrow transplant.

Contribution

The authors N. Bouanani and A. Naim contributed equally to this manuscript.

All the authors have read and agreed to the final manuscript.

Disclosure of interest

The authors declare that they have no competing interest.

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A case of COVID-19 Convalescent Plasma Donation in Greece: Directed donation for compassionate use in the donor's critically ill father

To the Editor,

In line with the position paper of the WHO Blood Regulators Network published in 2017, the use of convalescent plasma has been considered as a therapeutic option in the COVID-19 pandemic [1–4]. It was reported to be beneficial to severely affected patients in some early observational studies and preliminary uncontrolled case series [5–7]. However, it was not always possible to determine whether the observed improvement could have been related to therapies other than the COVID-19 convalescent plasma (CCP). All published reports before the present one refer to donations of CCP from unrelated donors, whereas we present a case of directed CCP use in a critically ill patient with COVID-19.

The patient, a 66-year-old man with fever, was initially prescribed clarithromycin, and subsequently admitted to hospital because of radiographic evidence of bilateral pulmonary infiltrates. As a result of clinical deterioration and confirmation by molecular testing of the presence of SARS-CoV-2 genetic material, he was transferred on the 8th day from onset of the disease to a reference Intensive Care Unit. He was intubated and treated with hydroxychloroquine, lopinavir/ritonavir and a combination of moxifloxacin, meropenem, and linezolid; later with colimycin, linezolid and ceftazidime-avibactam and finally with colimycin plus tigecyclin and anidulafungin, when colonization with multiresistant bacteria and fungi was revealed. By the 17th day from onset he was severely ill, haemodynamically unstable, with compromised renal and hepatic function, needing high doses of inotropic agents and continuous intravenous corticosteroid infusion, in serious respiratory distress despite high ventilator settings.

During the pandemic, the Greek Ministry of Health broadcast local and international information daily, including therapeutic modalities worldwide. Although at that time, no official clinical trial had been announced in Greece and no CCP units had been collected, the use of CCP was beginning to emerge and, hearing this, the patient's adult son (himself a confirmed COVID-19 patient, with mild disease symptoms and same symptom onset time as his father) investigated the possibility of offering plasma as a therapeutic last resort, by contacting the Coordinating Centre for Haemovigilance and Surveillance of Transfusion (SKAEM) of the Hellenic National Public Health Organization (NPHO). He was instructed to wait until at least 28 days from the onset or 14 days from the end of symptoms and to be retested before donating (two consecutive negative molecular tests for the virus before donation or at least one negative test on the donation day are required). The clinicians explained that this delay could compromise the outcome, and that the use of CCP might be of little or no benefit to a patient with such bad prognostic indices [8].

The patient's son's persistence and pleading led to scheduling the directed plasma donation. It was clear that the inevitably delayed administration of his plasma to the patient could offset the possible beneficial effect, but at least it was not expected to harm him. The candidate donor and the recipient were blood group compatible. The donor had no prior history of blood transfusion, therefore anti-HLA and anti-HPA antibodies would be absent. Since he was a first-time donor, it was decided to proceed with the donation of one whole blood unit, not plasmapheresis. All required donor selection and blood screening criteria were in accordance with the relevant Greek legislation for blood donors. Molecular testing of a nasopharyngial sample taken on the donation day (31st day from disease onset) was negative. Detection of neutralizing antibodies in the donor's serum was not performed, since it is not mandatory in the EU programme of COVID-19 CCP collection and transfusion [9]. However, specific anti-SARS-CoV-2 IgG and IgA antibodies in the donor's serum were detected and measured using a commercial kit. The plasma was separated and kept frozen until administered to the patient on the 33rd day from onset, after all necessary procedures had been completed (proxy signed consent forms, approval from the Institutional Ethical and Scientific Committee). No adverse reactions associated with the 200 ml plasma infusion (performed slowly over 4 hours) were observed. The condition of the patient remained critical and he expired from cardiopulmonary arrest in the context of septic shock, on the 37th day after onset of the disease.

As far as we know, this was the first CCP administration in Greece (on April 20, 2020). Among the general issues arising from this case, we wish to draw attention to the problems related to the lack of CCP stock, leading to the failure of crucial timely CCP administration and to the specific safety measures required when one has to rely on family members.

Authors' contributions

GV, and EF were responsible for the integrity and accuracy of clinical data of the patient and researched data for the article. CP coordinated the study, was responsible for recruiting the CCP donor, counseling the clinical team, researched data for the article and provided critical revision of the manuscript. CP and HHM were responsible for clinical data of the CCP donor, the conceptual framing and drafting the manuscript. AM was responsible for the serologic investigation and offered critical advice.

Disclosure of interest

The authors declare that they have no competing interest.

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Recognizing the role of transfusion medicine specialist in the modern era

Sir,

Nowadays, with the technical advancements in the field of blood transfusion, happening at a speedy pace, the journey of Transfusion medicine (TM) in India from mere blood banking is getting all explored [1–3]. We must realize that the "quiet days" of blood banking are up and over. Today, the TM specialist plays an overtly visible role in serving the medical fraternity [4]. His role is not just limited to altruistically provide blood donation services [5], rather it is to optimize the ongoing transfusion practices both within the confines of the hospital and for the community at large. Conventionally, when the blood donors continue to be the cornerstone of