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.

45.6% [n = 119/261] did not receive our phone call despite several attempts, as against 35.6% [n = 93/261] who cited they were "too busy to come to the BTC due to their schedule" followed by 7% [n = 18/261] who cited their inability to come since "the distance was too far from the BTC". Nonetheless, amongst the 30% SRBD who came to our facility for a one-on-one counselling session with the BBP, the strategic six-step SPIKES protocol was meticulously applied on. During the sessions, quite notably, 84% [n = 94/112] SRBD remained calm and composed, while 9% [n = 10/112,], 4% [n = 4/112] and 3% [n = 3] showed varied feelings such as concern for financial and health implications in future, anger and denial respectively. One SRBD [having HIV] showed extreme anxiety leading to a transient fainting spell. The donor was managed appropriately and brought up to the ICTC in accordance with our department SOP. In an Indian study by Agarwal et al. [Involving 416 reactive donors], only 59.8% subjects attended counseling after knowing their reactive status [7]. In another study from southern part of India, Raturi et al. showed a moderate response rate [58%] to the calls made to the SRBD [8]. a. Our data, however, showed a poor response rate i.e. merely 30% [n = 112/373] to our multiple telephonic communication attempts. We noticed that the response rate among the SRBD was better i.e. 33% [n = 62/187] in the year 2019 as against 27% [n = 50/186] in the year 2018 respectively. This may be attributed to an improvement in pre-donation counseling among the blood donors in the year 2019. Learning from the previous year (2018), we initiated a better dissemination of knowledge and understanding among the donors about various infectious markers and/or the screening test results. Additionally, perceptions regarding screening tests may vary among donors based on their socio-cultural beliefs [9]. In the present study, we found that around 8.3% [n = 31/373] SRBD could not be contacted and informed about their abnormal test results. Incomplete phone numbers along with the inaccurate demographic details provided by the donors were the main reasons accountable for the 'no-response' cohort or 'absenteeism' among the SRBD. Hence, there is a collective need to improve donors' understanding about various serological tests as well as ensuring that their accurate demographic details are captured prior to their donation.

One of the limitations of this study was that the actual state of the disease among these SRBD could not be assessed. Once referred by us to the respective specialty, the onus of follow-up of these SRBD stayed with the clinician and not the BTC. The emotional responses we observed were, therefore, captured while applying the SPIKES protocol at our facility prior to the actual confirmation of the disease which happened later in the clinics. To conclude, successful implementation of the SPIKES protocol has given us a beam of hope towards building a good doctor-donor relationship within our facility. Additionally, a structured counselling strategy such as this may be applied in any hospital-based BTC to help alleviate the anxiety and negate the psychological shock that may adversely affect the apparently healthy but serologically reactive blood donors.

Disclosure of interest

The authors declare that they have no competing interest.

Research involving human participants and/or animals

Human participants.

Informed consent

As per the department policy an informed consent is obtained from all blood donors prior to donation process.

Ethical Approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional ethics committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Funding and resources

None.

Acknowledgement

The authors gratefully acknowledge the support and cooperation of Mrs Kavita Negi [Blood donor counselor] for her help in data collection.

References

[1] Camargo NC, Lima MG, Brietzke E, Mucci S, Góis AF. Teaching how to deliver bad news: a systematic review. Revista Bioética 2019;27:326–40.
[2] Pereira CR, Calônego MA, Lemonica L, Barros GA. The PACIENTE Protocol: an instrument for breaking bad news adapted to the Brazilian medical reality. Revista da Associação Médica Brasileira 2017;63:43–9.
[3] Saran RK. Blood Transfusion Safety and Regulatory Requirements. In: Transfusion medicine technical manual DGHS. 2nd ed. Ministry of Health and Family Welfare; 2003. p. 383–416.
[4] Guidelines for Blood Donor Selection and Blood Donor Referrals. [Accessed on 2020, Feb 05]. Available from: http://naco.gov.in/blood-transfusion-services-publications.
[5] Kotwal U, Doda V, Arora S, Joshi M. Reactive donor notification: first error reported. Asian J Transfus Sci 2014;8(2):135–6.
[6] Baile WF, Buckman R, Lenzi R, Glober G, Beale EA, Kudelka AP. SPIKES—a six-step protocol for delivering bad news: application to the patient with cancer. The oncologist 2000;5:302–11.
[7] Agarwal N. Response rate of blood donors in the Uttarakhand region of India after notification of reactive test results on their blood samples. Blood Transfus 2014;12:s51–3, http://dx.doi.org/10.2450/2012.0100-12.
[8] Raturi M, Shastry S, Raj P. Response rate of sero-reactive blood donors to notification and counselling. J Transfus Med 2018;11:144–50.
[9] Roshan TM, Rosline H, Ahmed SA, et al. Response rate of Malaysian blood donors with reactive screening test to transfusion medicine unit calls. Southeast Asian J Trop Med Public Health 2009;40:1315–21.

M. Raturi [a,*]
A. Kusum [b]
[a] *Department of Immunohematology and Blood Transfusion, Himalayan Institute of Medical Sciences, Swami Rama Himalayan University, Swami Ram Nagar, Jolly Grant Dehradun, 248016 Uttarakhand, India*
[b] *Department of Pathology, Himalayan Institute of Medical Sciences, Swami Rama Himalayan University, 248016 Uttarakhand, India*

* Corresponding author.
E-mail address: manishraturi@srhu.edu.in
(M. Raturi)

Available online 16 June 2020

https://doi.org/10.1016/j.tracli.2020.05.004

Plasma from donors convalescent from SARS-CoV-2 infection–A matter of priorities

A number of studies have described the transfusion of plasma, harvested from donors who have recovered from SARS-CoV-2 (COVID-19) infection, to infected patients suffering from acute illness [1,2]. The promising results reported in these small observa-

tional studies have stimulated global interest in the organisation of collection systems for this "convalescent plasma" (CP). It is recognised that this modality's evidence base requires confirmation, and that a more standardised product for the delivery of antibodies to COVID-19 would be a hyperimmune immunoglobulin (Ig) manufactured industrially from CP, as is provided for other interventions [3]. The availability of such an Ig product would be valuable, in the first instance, in providing prophylactic protection to individuals at higher risk of acquiring COVID-19 infection, including health care workers and, if supply permits, individuals with co-morbidities. In the interim, the use of CP, if confirmed through further studies, is needed to treat patients suffering from infection. The establishment of global networks for the collection of CP, including the recent establishment of a "Plasma Coalition" bringing together a number of for-profit and not-for-profit plasma product manufacturers [4] is a commendable development in international collaboration. This plasma is intended, presumably, for the manufacture of hyperimmune Ig. This global effort, and similar systems under development within a number of countries, need to be managed carefully in order to ensure the continued supply of CP for the treatment of patients suffering from COVID-19 infection. In particular, in geographies covered by the "Plasma Coalition" [5] where paid plasma donation exists in tandem with the voluntary mainstream voluntary blood system, there is a risk that donations of CP may be deflected from the hospital based transfusion sector to the industrial environment. It is noteworthy that the manufacture of intramuscularly delivered immunoglobulins through the mainstream fractionation processes, which include hyperimmune industrial Ig, results in the loss of ca half the donated protein over the course of fractionation [6]. Until technologies which promise higher yields and which are more suited to the small volumes collected from immunised donors are available [7,8] it is therefore preferable that the collection of CP for the treatment of patients continues unhampered until the epidemic wanes and the urgent need of transfusable CP decreases. In the interim, donor panels for hyperimmune Ig production may be constructed and an optimal path for the provision of this medicine may be developed, hopefully with harmonisation between the major regulatory agencies. This parallel path will cover the demand for treatment as well as generating hyperimmune Ig for the protection of select groups. For the general population, provision of enough Ig is unlikely and will not provide long-term protection, and hence a vaccine is eagerly awaited.

Finally, in the rapidly developing field of therapeutics to Covid-19 infection, continued vigilance is required to ensure ethical principles are maintained. Convalescent plasma harvested from voluntary donors in state blood services is at risk of being deflected from therapeutic use through preferential patient allocation to clinical trials for other Covid-19 therapies funded by large pharmaceutical companies. The evidence base of some of these therapies is nebulous, and patient allocation to such trials, which needs to include control arms, may result in disadvantage to patients [9]. Given the continued body of evidence and public effort in the collection and use of convalescent plasma, it is to be hoped that this treatment will be considered as a first line modality and will not be obstructed by commercial considerations. In particular, a transparent, publicly-driven process is required, given that mechanisms have been developed to facilitate commercial companies' access to patients and patient organisations, a development which needs to be viewed with concern [10].

Disclosure of interest

The author declares that he has no competing interest.

References

[1] Shen C, Wang Z, Zhao F, Yang Y, Li J, Yuan J, et al. Treatment of 5 Critically Ill Patients With COVID-19 With Convalescent Plasma. JAMA 2020.
[2] Duan K, Liu B, Li C, Zhang H, Yu T, Qu J, et al. Effectiveness of convalescent plasma therapy in severe COVID-19 patients. Proc Natl Acad Sci USA 2020.
[3] Hsu JL, Safdar N. Polyclonal immunoglobulins and hyperimmune globulins in prevention and management of infectious diseases. Infect Dis Clin North Am 2011;25:773–88.
[4] Global Plasma Leaders Collaborate to Accelerate Development of Potential COVID-19 Hyperimmune Therapy [Internet]; 2020 [cited 2020 Apr 13] https://www.takeda.com/newsroom/newsreleases/2020/global-plasma-leaders-collaborate-to-accelerate-development-of-potential-covid-19-hyperimmune-therapy/.
[5] Donor centers for convalescent plasma [Internet]; 2020 [cited 2020 Apr 13]. https://www.donatingplasma.org/donation/find-a-donor-center.
[6] Oncley JL, Melin M, Richert DA, Cameron JW, Gross PM. The Separation of the Antibodies, Isoagglutinins, Prothrombin, Plasminogen and β1-Lipoprotein into Subfractions of Human Plasma. J Am Chem Soc 1949;71:541–50.
[7] Li G, Stewart R, Conlan B, Gilbert A, Roeth P, Nair H. Purification of human immunoglobulin G: a new approach to plasma fractionation. Vox Sang 2002;83:332–8.
[8] Newcombe AR, Cresswell C, Davies S, Watson K, Harris G, O'Donovan K, et al. Optimised affinity purification of polyclonal antibodies from hyper immunised ovine serum using a synthetic Protein A adsorbent, MAbsorbent® A2P. J Chromatography B 2005;814:209–15.
[9] Borba MGS, Val F, de A, Sampaio VS, Ara, amp MA, et al. Chloroquine diphosphate in two different dosages as adjunctive therapy of hospitalized patients with severe respiratory syndrome in the context of coronavirus (SARS-CoV-2) infection: Preliminary safety results of a randomized, double-blinded, phase IIb clinical trial (CloroCovid-19 Study). medRxiv 2020;16, 2020.04.07.20056424.
[10] Miseta E. Physicians And The Patient Recruitment Problem [Internet]; 2017 [cited 2020 Apr 29]. https://www.clinicalleader.com/doc/physicians-and-the-patient-recruitment-problem-0001.

A. Farrugia
Faculty of Health and Medical Sciences, University of Western Australia, Crawley 6009, Australia
E-mail address: albert.farrugia@uwa.edu.au

https://doi.org/10.1016/j.tracli.2020.05.002

Use of convalescent plasma in COVID-19 patients in China

To the Editor-As of 10:00 on 28 April 2020, there still remained 2,954,222 confirmed Coronavirus Disease 2019 (COVID-19) cases, according to data provided by WHO [1]. In the seventh edition treatment and diagnosis guideline of COVID-19 published by the National Health Commission on Mar 3, scientists have reached a consensus that the plasma of convalescent patients contains antibodies that the therapy so far has proved to be a safe and effective for critical symptoms, as well as patients with rapid onset of COVID-19 [2]. Donors must be recovered patients who are up to the standard for being discharged from hospital. During the SARS and Ebola epidemic, we also used the plasma of recovered people to treat infected patients [3,4]. International Council for Commonality in Blood Banking Automation has fast-tracked the release of new product description codes for convalescent plasma of COVID-19 patients.

China has developed convalescent plasma to treat patients who are infected with the COVID-19 and epidemic begins to subside in China. The therapy aims to use the antibodies in the convalescent plasma to neutralize the presence of the virus in patients. The patients have shown improved clinical symptoms about 12 to 24 hours after they received convalescent plasma, with main inflammatory indexes decreased significantly and some key

Abbreviations: COVID-19, Coronavirus Disease 2019; CSS, cytokine storm syndrome.