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Editorial

"Back to the future": after the pandemic we must intensify recovery☆

«Regreso al futuro»: tras la pandemia debemos intensificar la recuperación

On December 31, 2019, the headquarters of the World Health Organization (WHO) in China was informed of the appearance of cases of pneumonia of unknown etiology in the city of Wuhan, and on January 3, 44 patients were confirmed to have this pathology.[1] Since then, the outbreak of the disease has affected more than 12 million people worldwide and caused close to 600,000 deaths.[2]

This fast-paced progression from a localized outbreak to a pandemic forced healthcare systems to rapidly adapt their material and human resources, which interrupted the daily routine of hospital services worldwide. COVID-19 cases have saturated medical centers, forcing them to convert surgical wards into patient hospitalization and critical care rooms. Surgical teams have witnessed dramatic changes in their practices, with a drop in the number of surgeries, following the advice given in March by scientific societies to cancel non-oncological elective surgeries.[3] Hospital contingency plans ordered the initial cessation of scheduled surgical activity and, depending on the degree of occupation by COVID patients, all surgeries except for essential (urgent) procedures. A recent publication has estimated that some 28 million operations were canceled due to COVID-19.[4]

But surgery has not only been altered by the decrease in the number of operations. Protocols have also been altered, especially those that are relatively new and weakly implemented, such as fast-track recovery programs (ERAS).[5] Today, it is essential to remember that these evidence-based programs are efficient, reduce complications and shorten hospital stays, which is more necessary now than ever.

A recent survey promoted by the Spanish Multimodal Rehabilitation Group (*Grupo Español de Rehabilitación Multimodal*, or GERM), the Spanish Association of Surgeons (AEC) and the Spanish Society of Anesthesiology and Resuscitation (*Sociedad Española de Anestesiología y Reanimación*, or SEDAR) observed that many hospitals still do not apply these measures, while many with established programs may have been affected by the pandemic (Dr. Ripollés, personal communication).[6]

During this pandemic, we have also seen a drop in blood, organ and tissue donation. In the first weeks, donations fell by about 67% in China and Iran, while blood stock reserves were depleted to a mere three-day supply in the Netherlands and the United States, requiring national campaigns to promote donations and special measures to attract donors.[7–9] In Spain, donations fell by an estimated 20% in the eight weeks after March 15, with the nadir in week 15 showing a drop of 38%. As stated in a recent editorial in *Transfusion*, although COVID-19 RNA has been isolated in donors from labile blood components, "we think [post-transfusion infection] is unlikely, but we have not proven the negative." For this reason, as in all cases, a judicious transfusion practice is necessary, and "treatment decisions should be based on clinical risk/benefit analysis balancing the safety of not treating a bleeding event and any residual risk of acquiring another infection."[10]

On March 20, the WHO[11] issued a document warning of a possible risk of shortages and promoting a series of measures to ensure donation while increasing the safety of donors, workers and blood components. One month earlier, on February 19, it had published the 2020–2023 Action Framework to "advance universal access to safe, effective and quality-assured blood products." For years, the WHO has been promoting "the appropriate use of blood products, hemovigilance systems and Patient Blood Management (PBM) programs." For the immediate future, its strategic objectives include the "effective implementation of PBM to optimize the clinical practice of transfusion".[12]

Transfusions are often prescribed when simple and safe alternative treatments can be at least as effective. Unnecessary transfusions expose patients to risks and extra costs. In a recent national multicenter study,[13] the presence of anemia or

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a low hemoglobin level at the time of admission and blood transfusion were independent risk factors for moderate-severe complications, infection, and prolonged hospital stay. However, hospitals are finding it difficult to maintain or restart preoperative anemia optimization programs after progressive post-pandemic recovery.

Now more than ever is a time for action., the Council of Europe published two documents, one for multidisciplinary hospital teams, the other for healthcare authorities for the implementation of PBM programs.[14] These PBM programs must be, integrated in enhanced recovery protocols in this new reality.

In our hospital setting and our environment, the COVID-19 pandemic is gradually waning. We are beginning to see light at the end of the tunnel, and it is time to prepare for getting back to 'normal'. Surgery services and departments have undergone great changes, and change is a friend of innovation. Many hospitals across the country have already established protocols so that the return to elective surgery is safe, for patients as well as healthcare providers. Furthermore, it is a unique opportunity to implement strategies to improve surgical patient care, especially enhanced recovery programs with integrated PBM[15] in hospitals that did not previously have them, and to reestablish these programs where they had been left by the wayside.

All of us who are involved in the implementation of ERAS protocols and the hospital PBM program (but especially the hospital administration and directors of services and departments) need to adjust strategic plans for current and future needs. We should not forget that the adequate application of perioperative care and immediate preparation for surgery depends on the personnel of the hospital surgical wards. However, we must also consider the need for multidisciplinary structures (surgery, anesthesia, nursing, nutrition, hematology, internal medicine, and even primary care) for adequate preoperative optimization (prehabilitation). Comprehensive preoperative optimization will be key in postoperative recovery, reduction of complications, and savings in resources, because it is not about saving blood, but about achieving the best clinical results.

For more than 10 years, we have been insisting on the advantages for our patients of incorporating the fast-track recovery and PBM into routine clinical surgical practice for most procedures, regardless of the specialty. At this time, we believe that it is a necessity, because efficiency is one of the advantages of the ERAS and PBM that will undoubtedly help sustain our national healthcare system. The integration of exercise, adequate nutrition, the correction of anemia, hemostasis and psychosocial components, with multimodal optimization in the preoperative period, lead to an improved functional capacity of patients undergoing surgery, with the consequent improvement in clinical and economic results.[13,15]

After the end of the Spanish 'State of Alarm' due to the COVID-19 pandemic, one of the priorities of surgical teams, for the benefit of our patients, the health system and society, should be to routinely incorporate enhanced recovery after surgery (ERAS) and patient blood management (PBM) programs in our daily practice.

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