choscopes, given the weakness of their protective covering, often results in the loss of this seal, which requires more frequent repairs and must be added to the costs of the surgery.

We have not had any cases of pancreatitis due to transpapillary stents, as the authors of the comments to our study have mentioned. We believe that the fistula rate may be related to the fact that we strictly apply the ISGLS classification, which was not really created for this purpose,[6] although it is all we have available to date.

In short, we share the enthusiasm for the transcystic pathway that we use, like most groups,[7] when it comes to extracting solitary stones measuring less than one centimeter in patients with normally inserted cystic ducts. Nonetheless, we believe that, at least in our setting, use of the transcholedochal approach continues to be more frequent and completely necessary.

REFERENCES

1. Martínez Isla A, Navaratne L, Quiñones Sampedro J, MArtínez-Cecilia D. Efficacy of fibrin-collagen sealant for reducing the incidence of biliary fistulae after laparoscopic exploration of the bile duct. Cir Esp. 2018. pii:S0009-739X(18)30290-2 [Epub ahead of print].
2. Zhou Y, Zha WZ, Wu XD, Fan RG, Zhang B, Xu YH, et al. Three modalities on management of choledocholithiasis: a prospective cohort study. Int J Surg. 2017;44:269–73. PubMed PMID: 28668286.
3. Hyodo T, Kumano S, Kushihata F, Okada M, Hirata M, Tsuda T, et al. CT and MR cholangiography: advantages and pitfalls in perioperative evaluation of biliary tree. Br J Radiol. 2012;85:887–96. PubMed PMID: 22422383. Pubmed Central PMCID: 3474084.
4. Blumgart LH, Hann LE. Surgical and radiologic anatomy of the liver, biliary tract and pancreas. In: Jarnagin WR, editor. Blumgart's surgery of the liver, biliary tract, and pancreas 1. 5th ed. Philadelphia, PA: Elsevier; 2012; p. 31–57.
5. Al-Temimi MH, Rangarajan S, Chandrasekaran B, Kim EG, Trujillo CN, Mousa AF, et al. Predictors of failed transcystic laparoscopic common bile duct exploration: analysis of multicenter integrated health system database. J Laparoendosc Adv Surg Tech A. 2018 Sep;12. PubMed PMID: 30207856.
6. Koch M, Garden OJ, Padbury R, Rahbari NN, Adam R, Capussotti L, et al., Bile leakage after hepatobiliary and pancreatic surgery: a definition and grading of severity by the International Study Group of Liver Surgery. Surgery. 2011;149:680–8. PubMed PMID: 21316725.
7. Pang L, Zhang Y, Wang Y, Kong J. Transcystic versus traditional laparoscopic common bile duct exploration: its advantages and a meta-analysis. Surg Endosc. 2018;32:4363–76. PubMed PMID: 29943056.

Pablo Parra-Membrives[ab*], Darío Martínez-Baena[b], José Manuel Lorente-Herce[b], Ramón Martín-Balbuena[b]

[a]*Departamento de Cirugía, Facultad de Medicina, Universidad de Sevilla, Sevilla, Spain*
[b]*Unidad de Cirugía Hepatobiliar y Pancreática, Servicio de Cirugía General y del Aparato Digestivo, Hospital Universitario de Valme, Sevilla, Spain*

**Corresponding author.*
E-mail address: pabloparra@aecirujanos.es
(P. Parra-Membrives).

2173-5077/

Evaluation and Treatment of Anemia Prior to Surgery: A Challenge to Improve☆

Evaluación y tratamiento de la anemia de forma previa a la cirugía: un reto por mejorar

We have carefully read the recent article by Dr. Bruna et al. about the results of a national survey on perioperative care in gastric resection surgery. In their study, no reference is made to the management of perioperative anemia.[1] However, 2 other recent articles published by Cirugía Española about the application of multimodal rehabilitation in gastric and esophageal resection surgery[2,3] (with the collaboration of the same author and some of the collaborators) do recommend the evaluation and treatment of preoperative anemia. However, it is surprising that different levels of recommendation based on evidence are given, even more so when both articles refer to the National Clinical Pathway for Enhanced Recovery in Abdominal Surgery (RICA), endorsed by Guía Salud.[4]

RICA was published in 2015 by the Spanish Ministry of Health and includes among its 50 recommendations at least 6 regarding the preoperative management of anemia. Two merit mentioning here: Point 7: ''The detection of preoperative anemia is recommended as it is associated with increased perioperative mortality.'' (Strong recommendation+High level of evidence); and Point 8: ''Hemoglobin (Hb) determination is

☆ Please cite this article as: Jericó Alba C, Ripollés-Melchor J, Ramírez-Rodríguez JM, García-Erce JA. Evaluación y tratamiento de la anemia de forma previa a la cirugía: un reto por mejorar. Cir Esp. 2019;97:121–122.

recommended in patients scheduled for elective surgery at least 28 days before the procedure, which allows for sufficient time to stimulate erythropoiesis, if necessary.'' (Strong recommendation+Moderate level of evidence).[4] However, paradoxically, the Clinical Practice Guidelines for perioperative care in Major Abdominal Surgery, published by the Spanish Ministry of Health (latest version from 2016), makes no reference to the diagnosis and treatment of anemia.[5]

In our country, these RICA programs are promoted and updated periodically by the Spanish Multimodal Rehabilitation Group (GERM), who have recently conducted a new study using the Delphi methodology, the results of which have been presented at their national meeting in 2018 held in Salamanca, Spain. The GERM, aware of the approach necessary for preoperative anemia, have included the following recommendations, approved in consensus by the panel of experts: (1) to postpone or delay surgery up to 4 weeks for the study and treatment of anemia and/or iron deficiency; and (2) to avoid differentiation between sexes of the target Hb level, whose recommended goal should be equal to or higher than 13 g/dL at admission prior to surgery, both for men and for women.[6]

In conclusion, because anemia is one of the most frequently observed comorbidities in surgical patients that direct influences patient prognosis as it is associated with longer hospital stay and greater morbidity and mortality, and because it is also a modifiable factor, proper etiological and etiopathogenic diagnosis is essential. This should be done as soon as possible and with enough time to be able to correct Hb levels prior to the intervention.[7,8]

The management of anemia in the perioperative period, together with other Patient Blood Management (PBM) measures based on the optimal use of patient-centered blood transfusion,[9] should be included in the evaluation of multimodal rehabilitation programs.[10]

Conflict of Interests

This article has been developed and promoted by its own initiative, with no influence from third parties, and with no funding. All the authors have participated in its composition.

We declare that we have no conflicts of interest in the writing of this letter.

However, in the past Drs. CJA and JAGE have given talks, moderated tables in congresses and conferences and organized courses with grants or funding from Amgen, Jansen, Sandoz, Vifor or Zambon.

REFERENCES

1. Bruna M, Navarro C, Báez C, Ramírez JM, Ortiz MÁ. Resultados de la encuesta nacional sobre cuidados perioperatorios en cirugía resectiva gástrica. Cir Esp. 2018;96:410–8.
2. Bruna Esteban M, Vorwald P, Ortega Lucea S, Ramírez Rodríguez JM, Grupo de Trabajo de Cirugía Esofagogástrica del Grupo Español de Rehabilitación Multimodal (GERM). Rehabilitación multimodal en la cirugía de resección gástrica. Cir Esp. 2017;95:73–82.
3. Vorwald P, Bruna Esteban M, Ortega Lucea S, Ramírez Rodríguez JM, Grupo de Trabajo de Cirugía Esofagogástrica del Grupo Español de Rehabilitación Multimodal (GERM). Rehabilitación multimodal en la cirugía resectiva del esófago. Cir Esp. 2018;96:401–9.
4. Grupo de trabajo. Vía Clínica de Recuperación Intensificada en Cirugía Abdominal (RICA). Edita: Ministerio de Sanidad, Servicios Sociales e Igualdad. Edita: Instituto Aragonés de Ciencias de la Salud. Guía Salud. Zaragoza 2015. Available from: http://portal.guiasalud.es/contenidos/iframes/documentos/opbe/2015-07/ViaClinica-RICA.pdf [accessed June 2018].
5. Grupo de trabajo de la Guía de Práctica Clínica sobre Cuidados Perioperatorios en Cirugía Mayor Abdominal. Guía de Práctica Clínica sobre Cuidados Perioperatorios en Cirugía Mayor Abdominal. Ministerio de Sanidad, Servicios Sociales e Igualdad. Instituto Aragonés de Ciencias de la Salud (IACS); 2016 Guías de Práctica Clínica en el SNS.
6. Fit for Surgery. Documento de trabajo. Estudio Delphi. Grupo Español de Rehabilitación Multimodal. III Congreso GERM. Salamanca, April 2018.
7. Fowler AJ, Ahmad T, Phull MK, Allard S, Gillies MA, Pearse RM. Meta-analysis of the association between preoperative anaemia and mortality after surgery. Br J Surg. 2015;102:1314–24.
8. Ripollés-Melchor J, Carli F, Coca-Martínez M, Barbero-Mielgo M, Ramírez-Rodríguez JM, García-Erce JA. Committed to be fit. The value of preoperative care in the perioperative medicine era. Minerva Anestesiol. 2018;84:615–25.
9. Ripollés-Melchor J, Jericó-Alba C, Quintana-Díaz M, García-Erce JA. Del ahorro de sangre al patient blood management. Med Clin (Barc). 2018. http://dx.doi.org/10.1016/j.medcli.2018.02.027.
10. García Erce JA, Laso Martínez MJ. «Patient Blood Management» en la Vía Clínica de Recuperación Intensificada en Cirugía Abdominal. Cir Esp. 2017;95:552–4.

C. Jericó Alba[ab], J. Ripollés-Melchor[cdef], J.M. Ramírez-Rodríguez[cdg], J.A. García-Erce[acdhi*]

[a]*Grupo Multidisciplinar para el Estudio y Manejo de la Anemia del Paciente Quirúrgico (http://www.awge.org), Spain*
[b]*Servicio de Medicina Interna, Consorci Sanitari Integral, Hospital de Sant Joan Despí Moisès Broggi, L'Hospitalet de Llobregat, Barcelona, Spain*
[c]*Spanish Perioperative Audit and Research Network (REDGERM), Spain*
[d]*Grupo Español de Rehabilitación Multimodal (GERM), Enhanced Recovery After Surgery (ERAS) Spain Chapter, Spain*
[e]*Servicio de Anestesiología y Reanimación, Hospital Universitario Infanta Leonor, Madrid, Spain*
[f]*Universidad Complutense de Madrid, Madrid, Spain*
[g]*Servicio de Cirugía General, Hospital Clínico Universitario Lozano Blesa, Zaragoza, Spain*
[h]*Banco de Sangre y Tejidos de Navarra, Servicio Navarro de Salud-Osasunbidea, Pamplona, Navarra, Spain*
[i]*Grupo de Trabajo de la Sociedad Española de Transfusión Sanguínea «Hemoterapia basada en sentido común», Spain*

*Corresponding author.
E-mail addresses: ja.garcia.erce@navarra.es, jagarciaerce@gmail.com (J.A. García-Erce).

2173-5077/