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#### Letters to the Editor

## Implantable venous devices: main complications and associated risk factors<sup>☆</sup>



### Dispositivos venosos implantables: principales complicaciones y factores de riesgo asociados

To the Editor:

We are writing in reference to the article published in February 2020 by Pérez Calvo et al., "Comparative Study of Access Routes for Port-A-Cath® Implantation", which we have read with great interest.

The number of patients treated with implantable venous devices has increased considerably due to the increase in cancer patients, and we must make an effort to study the factors associated with their application and complications. However, to complement this study, we would like to expand on the information regarding the risk factors related to complications secondary to the use of these devices.

Pérez Calvo et al. 1 report a lower rate of overall complications using vein dissection (VD) versus vein puncture (VP). Many of these complications are directly related to the surgical technique used: pneumothorax, hematoma, vascular or nerve injury, etc. Thus, we consider the comparison between VP and VD adequate in terms of these complications.

However, the most frequent complications in the article were infection and thrombosis. Multiple factors have been directly related to both complications. Neutropenia, medication administered, infusion of parenteral nutrition and patient comorbidities are the risk factors most frequently related to infection or thrombosis after the placement of a central venous catheter. Pérez Calvo et al. analyzed age, sex, BMI, ASA, laterality and reason for placing the device as comparative variables between both groups, ignoring the previously mentioned factors. These could act as confounders, distorting the overall results of the study.

Penel et al.<sup>2</sup> conducted a multivariate analysis, which identified young age, surgical difficulties and the administration of parenteral nutrition as risk factors that were significantly associated with systemic infection. When comparing VD and VP, Aspiazu et al.,<sup>3</sup> found that the use of small-caliber catheters (<6 French) was a risk factor for a higher infection rate. Other factors related to infection were hematologic neoplasms, therapy administered through the catheter, and neutropenia, as well as its duration.<sup>2,4,5</sup> The use of antibiotics has been considered a protective factor during the insertion of these devices,<sup>6</sup> but the results of several studies analyzing this association have been controversial.

Thus, due to the growing use of these devices in recent years, we want to congratulate the authors for their contribution towards defining the advantages and disadvantages of placement with both techniques described. However, we consider the comparison of the two workgroups interesting given the previously mentioned factors. We feel that these results are a significant contribution to the scientific literature in order to promote the safe use of these devices, which are increasingly necessary for our patients.

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<sup>\*</sup> Please cite this article as: Casal-Beloy I, García-Novoa A. Dispositivos venosos implantables: principales complicaciones y factores de riesgo asociados. Cir Esp. 2020;98:567–568.

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Isabel Casal-Beloy<sup>a,\*</sup>, Alejandra García-Novoa<sup>b</sup>

<sup>a</sup>Servicio de Cirugía Pediátrica, Complejo Hospitalario Universitario A Coruña, A Coruña, Spain

<sup>b</sup>Servicio de Cirugía General y del Aparato Digestivo, Complejo Hospitalario Universitario de A Coruña, A Coruña, Spain

\*Corresponding author.

E-mail address: isabelcasalbe@gmail.com (I. Casal-Beloy).

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# In relation to "Response to 'Management of splenic injuries utilizing a multidisciplinary protocol in 110 consecutive patients at a level II hospital"



A propósito de «Respuesta a "Resultados en el tratamiento de traumatismos esplénicos utilizando un protocolo multidisciplinar en 110 pacientes consecutivos en un hospital de nivel II"»

To the Editor:

We have read with interest the article by Zurita et al.<sup>1</sup> and the response to it by Sánchez et al.<sup>2</sup> on their experience with the management of splenic injuries. We agree with the authors of both publications on the indications for non-operative management (NOM) and management of splenic trauma. We would like to add the experience of our center, which is also a level II hospital.

We have compared the results of Zurita et al. <sup>1</sup> with those of our series. From 2007 to 2019, our hospital treated 41 patients with splenic trauma. Out of these, 28 required urgent surgery (27 splenectomies and one spleen-preserving surgery), while NOM was chosen in 13 cases. The indication for urgent surgery was based on the hemodynamic stability of the patient and the classification of the American Association for Surgery of Trauma (AAST). <sup>3</sup> Compared with the Zurita et al. group, our

caseload is quite smaller because the most serious injuries are transferred to the referral center that is 8 km from ours and has Neurosurgery and Interventional Radiology services available 24 h a day. Three of the 13 cases that received NOM required urgent splenectomy. This represents a failure of NOM of 32%, which is much higher than rates reported in the literature. The percentage of patients who required splenectomy was 68%—a result that is also higher than reports in the literature (approximately 50% of the patients would be candidates for NOM<sup>4</sup>).

Reviewing the results, we were surprised by our higher rate of splenectomies and NOM failure, and we reviewed the cases to find an explanation. We think that it was due to the fact that it is a small series that is also biased, as severe polytrauma and patients with injuries treatable with embolization are transferred to the referral center. At our hospital, we treat less serious trauma and patients in situation of hemodynamic instability who are brought in due to proximity. This situation explains

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