

## Apropos of the first malleable lung retractor to facilitate extrapleural harvesting of the internal thoracic artery

### *A propósito del primer separador retráctil de pulmón para facilitar la disección extrapleural de la arteria torácica interna*

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### To the Editor:

We have carefully read the article “First retractable lung spreader to facilitate extrapleural dissection of the internal thoracic artery” by López de la Cruz *et al*<sup>1</sup>, recently published in this CorSalud journal, and due to its relevance we consider necessary to make some comments about it.

First, we would like to highlight the interesting historical review made by the author regarding the technique used in the internal thoracic artery dissection, including quoting the original article by James M. Cunningham in 1992, which is the reference with the greatest impact until nowadays, due to the fact that it masterfully describes the skeletonized technique to be used in the graft harvesting, after being employed in his series of 1029 patients<sup>2</sup>. This was a great achievement in the coronary artery surgery

evolution, since the pedicled technique<sup>3-5</sup> was used in the initial works developed by the father of the myocardial revascularization, René G. Favaloro, at the Cleveland Clinic, Ohio.

We have quoted only two references, although, as it is specified by the author in his article<sup>1</sup>, there are many groups in the world whose results patent the skeletonized technique over the pedicled one<sup>6-10</sup>; however, our concern goes further and it is related to the message transmitted from the very title of the article, when it is considered to be the first lung retractor used in the internal thoracic artery harvesting, and –later– in the summary it is stated that this device has never been manufactured<sup>1</sup>.

We bring back the original article by Cunningham<sup>2</sup>, due to the fact that López de la Cruz quotes: “in 1992 they pointed out that a retractor strategically placed could provide an excellent exposure in this situation”<sup>1</sup>. Nonetheless, what Cunningham actually wrote was, “a strategically placed malleable retractor provides excellent exposure in this situation”; therefore, it is not that “it could provide” (*podría proveer*, in Spanish) but that it provides; what confirms that he used to use a lung retractor in the proximal third of the internal thoracic artery. Later, for leaving no doubt, he writes at the beginning of a paragraph and we quote: “while the retractor is still in place and exposure is good...”, that is to say, in

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Spanish, “*mientras el separador está aún colocado y la exposición es buena...*” (while the retractor is still placed and the exposure is good...)<sup>2</sup>.

Nowadays, there are several lung retractors to carry out this procedure and others specifically from cardiac or oncologic surgery; one of the most commercialized and popular is the “ZAIKIND LUNG RETRACTOR malleable” available at [www.simaecommedical.com](http://www.simaecommedical.com), in addition to other accessories with the same objective, both, on the conventional heart surgery and in the minimally invasive laparoscopic or robotic surgery, or for less conventional approaches like the infra-axillary method<sup>11-14</sup>.

It is curious that in the wide bibliographical review made by the author until nowadays, he did not find these articles; that is why we quoted them in the references<sup>11-14</sup>. However, due to the significance of the work for this surgical technique’s evolution and regarding the cardiovascular surgery history, we are going to analyze only two examples. First, Kumar and collaborators<sup>15</sup> describe in detail, in 2006, the technique used for the lung retraction during the internal mammary artery harvesting, where they used the suction stabilizer retractors Octopus IV (Medtronic Inc, Minneapolis, MN) in 30 patients and 42 mammary arteries with excellent results; second, and surprisingly, is that one of the giants of the pediatric cardiovascular surgery, Willys J. Potts, designed a two-finger flexible retractor for the effective lung retraction during the heart surgery in children<sup>16</sup>. Dr. Potts was appointed in 1945 as Chief of the Surgery Department in the Children's Memorial Hospital of Chicago and he had the good fortune of having the help of the talented artisan Bruno Richter, for the manufacturing of many surgical instruments that he used to designed thanks to his inventiveness and constant research, in order to achieve better results in the, by that time, still young pediatric cardiovascular surgery<sup>16</sup>.

Dear Editor, our objective is not being, or not being right, Cunningham himself started an interesting controversy just over a decade ago in the *Annals of Cardiothoracic Surgery*<sup>17,18</sup>; the idea is to promote a discussion that can enrich the cultural and scientific background of our readers.

## CONFLICT OF INTERESTS

None declared.

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## Apropos of the first malleable lung retractor to facilitate extrapleural harvesting of the internal thoracic artery. Reply

### *A propósito del primer separador retráctil de pulmón para facilitar la disección extrapleural de la arteria torácica interna. Respuesta*

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#### To the Editor:

We appreciate the letter from Rodríguez León *et al*<sup>1</sup> where they made a linguistic analysis of our article<sup>2</sup>

and questioned the quality of the bibliographical review carried out as part of its writing. It is surprising that –although it deals with specific technical aspects of coronary surgery– our paper has drawn the attention of colleagues with relatively little experience in the field. Perhaps this is the cause of their doubts, which we will try to clarify with great satisfaction. But first, some points need to be made here.

When the history of internal mammary (thoracic) artery (IMA) dissection procedures has not been thoroughly studied, it is mistakenly thought that its skeletonized harvesting was an achievement in the evolution of coronary surgery; well, it really happened the other way around. When Canadian surgeon Arthur Martin Vineberg first implanted an IMA

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