

Fact checking in the history of uniportal video-assisted thoracoscopic surgery

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Contributing to the surgical literature with a new technique is not like patenting a new device. New techniques are meant to help our patients in the everyday practice. Conversely, new devices eventually have the same aim but marketing issues may cloud the ability to objectively verify their actual impact on patient care. In my view, a new technique is the perennial contribution a surgeon offers to the community: the very first time it is published, it doesn't belong to you anymore—it becomes everybody's. And everybody can perfect the technique by contributing to expanding its indications and widespread use. This is exactly the case for uniportal video-assisted thoracoscopic surgery (VATS) surgery.

According to recent commentaries on the history of uniportal VATS surgery (1,2), the literature on uniportal VATS has seen the contribution of several authors in different eras (3). The authors of these commentaries correctly point out that several different definitions of the single access incision to the chest have been proposed to describe often different procedures with different levels of invasiveness (1,2). A Pubmed search of the term “Uniportal VATS” on July 15, 2016 (<http://www.ncbi.nlm.nih.gov/pubmed/?term=uniportal+vats>) yielded 161 papers, the first one, by publication date, being our original report of a preliminary experience in Sheffield which was focused on the description of the principles of uniportal pulmonary wedge resections (4). In this setting, the very first sentence of the paper published in 2004, based on an experience started in January 2000 and submitted for publication in February 2003, quoted “*In the recent literature, numerous attempts at performing diagnostic or therapeutic video-assisted thoracic surgery (VATS) procedures through a single port*

(uniportal VATS) have been reported” (4). Hence, albeit recognizing previous work in the field of uniportal VATS, this paper was focused on the description of an innovative approach to lung resection by VATS and is still considered seminal in the literature of uniportal VATS because it has represented the first attempt at codifying a set of procedures aimed at resecting the lung through a single port technique based on an innovative geometrical approach to a target lesion in the chest (5). In fact, several authors who reported their experience on uniportal VATS lobectomy later acknowledged that their technique represents the direct evolution of the original description of uniportal VATS wedge lung resection (5,6).

A completely different scenario is provided by the use of uniportal VATS to diagnose or treat other intrathoracic conditions. Again, a truthful reconstruction of the literature is needed as repeatedly requested by authors who consider themselves to be pioneers of uniportal VATS for having reported, over a 17-year period [1998–2015], roughly 12 uniportal VATS procedures per year largely performed for pleural effusions or mediastinal conditions (1,2,7,8). In fact, no experience with uniportal VATS lung resection had been reported from this group in the two initial reports published in prestigious journals (7,8). However, if the literature is searched for previous manuscripts on single port thoracoscopic surgery utilized for non pulmonary conditions, several authors have published before these valuable contributions (9–11). Truth be told, the concept of uniportal VATS was proposed by Singer back in 1924 who devised an instrument to perform procedures through the same incision (12). In this setting, it is obvious that

thoracoscopy itself was uniportal, by birth (12).

Needless to say, in surgery, as in other disciplines, there is a distinct possibility that different researchers come to the same conclusions independently through separate development pathways. A careful analysis of study periods, submission and publication dates of different manuscripts may clarify potential doubts (4,7,8). Nevertheless, to be entitled to a role among pioneers of a surgical technique as well as for any innovative idea, it becomes crucial to see this idea through, to strive for its implementation (13). Since our report in 2004 (4), in the absence of large numbers to support its use, uniportal VATS has been seen at best as useless (and dangerous) acrobatics, especially when Dr. Gonzalez-Rivas and his group from La Coruna subsequently reported uniportal VATS major pulmonary resections (6). During this obscure period, while some surgeons took the burden upon themselves to patiently guide the process and published several contributions on all aspects of uniportal VATS surgery, others kept silent to weather the storm (14-16). Unlike today, not many surgeons were ready to jump on the bandwagon for the fear to be run over by it (14,15). This is the real history of uniportal VATS, a technique as old as thoracic surgery itself; any other interpretation requires checking the facts. Like for all surgical techniques, it doesn't actually matter today who devised uniportal VATS—what really matters today is for the technique to stand the test of time (15-17).

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Footnote

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