Transcollation: lost in translation?

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Why is it that some useful technologies are adopted slowly by surgeons? There are obvious reasons, of course, such as prohibitive cost or limited availability. But can the lack of a consistent name for a product delay its becoming mainstream? In the article by Ibrahim et al. [1] the salutary effects of Transcollation™ technology are described.

Transcollation™ is a rebranding of a technology that has been around for over a decade that uses saline flow around a radiofrequency probe to improve the effectiveness of coagulation and tissue sealing. This new word is not found in an English dictionary; but its components (collate-bring together and trans-through) probably refer to the effect that the saline has on allowing superficial tissues to coagulate and seal at no more than 100°C. Detailed descriptions on how it works can be found in its first report in the thoracic literature and a recent biomedical engineering report [2, 3]. Unfortunately, searching for ‘Transcollation’ will yield only one other report detailing its efficacy for pulmonary bullous disease [4]. Before that, the technology was commonly referred to by its trade names ‘Tissuelink™’ or, later, ‘Aquamantys™’.

There have been many other reports under different titles, showing its efficacy for other specialties that deal with organs that resist diathermy haemostasis. The most notable organs or regions are the liver, kidney, pelvis and spine. However, the earliest PubMed search of ‘Tissuelink™’ was actually in the thoracic literature, suggesting its efficacy for non-anatomical lung resection [3]. Unfortunately, because there was a reluctance to use a brand name in the title, ‘Saline enhanced thermal sealing’ was used perhaps obscuring it from citation by the authors of this current work. Besides the changing brand names, there has been little consensus on this device’s generic moniker. ‘Bipolar sealer’, ‘saline-linked’, ‘saline-cooled’, ‘saline-coupled’, ‘irrigated’, ‘radiofrequency dissector or sealer’, ‘parenchymal coagulation device’ and others are used in many different combinations in the literature. Thus, no consistent jargon has emerged to refer to it among surgeons.

While I have not conducted research on this product, my clinical experience with it has made it my preferred technology for any advanced case. I was first exposed to it by a colleague who used it to reduce the diffuse oozing that occurs during extrapleural dissections. Any accumulation of oozing blood that is manageable during an open case becomes a significant barrier to exposure during minimally invasive approaches that form the predominance of my practice. The results of Ibrahim et al. [1] are substantiated simply by comparing traditional cautery with Transcollation™ in the same patient with a widespread oozing field like the chest wall. Moreover, this device is very useful for rapidly controlling mild bleeding in the pulmonary parenchyma that is inconvenient to pack or potentially dangerous to use other forms of haemostasis. This comes into play frequently when opening fissures for lobectomy or segmental resections.

The flexible bipolar ball tip shown in their article can reach many of the desired areas of haemostasis through a VATS utility incision. When it cannot reach, the company makes an endoscopic 10-mm bipolar sealer and a 5-mm unipolar sealer, which are also very useful. The unipolar device can use a standard radiofrequency cautery generator but has the disadvantage of requiring manual release of a clamp to start the saline flow by gravity. The saline infuses automatically by a pump when actuating the energy for the other integrated devices.

While the advantages of Transcollation™ over traditional electrocautery become self-evident immediately to the user, there are other competing technologies for haemostasis such as argon beam coagulation or topical agents. Certainly, many are complementary and surgeons who perform advanced procedures believe that an array of technologies should be available and employed according to anatomical and physiological necessities [5]. Because saline and bipolar technology are available immediately in most operating theatres, some surgeons have crafted their own ‘Transcollation’ devices so as to reduce cost [6].

So while the barriers of cost and other factors that affect availability to surgeon may have played a role in the relatively slow adoption of this useful technology, the lack of a simple term to refer to it remains a problem for its branding and discussion among physicians. An innovative surgeon should probably allocate time to visit other operating theatres, especially those of different specialties, to discover technology that might be useful and about which they have not heard or read.

Perhaps Transcollation™, a word invention from industry, will ‘stick’ going forward so that a definable presence is achieved in the literature and in the vernacular. On the other hand, it is a registered trademark to that company, which might make it less desirable as a generic term. Unlike pharmaceutical development that requires a generic term to transcend the brand name, devices have no such mandate and thus clinical reports are more easily ‘lost in translation’. Perhaps such precision of terminology for which surgeons generally strive requires government oversight or can be dealt with...
by categorization standards from specialty societies or medical journals. Until then, authors should strive to include previous device descriptors in their titles and other searchable fields so that important investigations such as these remain accessible.

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**REFERENCES**


