Editorial

Thoracoscopy 1910–2010: Serendipity

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The history of medicine teaches us how to maintain enthusiasm when looking for new pathways in the care we offer to our patients. In 1910, Hans Christian Jacobaeus published the first paper on the use of optical instruments to explore the thoracic cavity [1]. Thoracoscopy was invented. To celebrate this centenary, we, an unofficial 'pleural group' of European interventional pulmonologists who practice thoracoscopy and do collaborative research in the field, decided to meet and spend some time at 'Chateau Mercier' near Crans-Montana. The aims of the meeting were to better understand how medicine advances in the development of new discoveries and to focus our thoughts more specifically on pleural diseases and thoracoscopy.

Marchetti et al. [2] did a marvelous job of going back to historical sources. They showed that from its inception, thoracoscopy was a minimally invasive technique which greatly facilitated the diagnosis of pleural diseases by allowing precise biopsies of pleural abnormalities. Before the discovery of efficient antituberculous drugs, thoracoscopy was also widely used by pulmonologists to perform lysis of pleural adhesions and create an artificial pneumothorax. This intervention was performed under local anesthesia on an outpatient basis and was called, at that time, the Jacobaeus procedure, reminding us that

medical thoracoscopy is a minimally invasive endoscopic technique that can easily be performed in a simple endoscopy suite, particularly since the advent of video endoscopy which offers high-quality visual exploration and video documentation.

In the sixties and seventies, thoracoscopy was almost forgotten, especially in the USA and UK, while many European centers went on using this technique and promoting research. The revival of thoracoscopy was initiated by the development of tools for endoscopic surgery coupled to video assistance. In the chest, this gave rise to video-assisted thoracic surgery (VATS). In order to differentiate between VATS procedures performed by thoracic surgeons and thoracoscopy performed by pulmonologists, there have been attempts at describing the latter as 'medical thoracoscopy' or 'pleuroscopy'. These new terms can, however, lead to confusion and are not generally accepted.

Thoracoscopy is a well-established method for the treatment of empyema, with a low complication rate as pointed out by Kern et al. [3]. This technique faces new challenges at the present time and is becoming less and less invasive as a diagnostic or therapeutic tool; cf. papers by Froudarakis [4], Janssen and Cardillo [5], and Tassi et al. [6]. Recently, we have also learned to better understand

the pathogenesis of primary spontaneous pneumothorax (PSP) [7]. Thoracoscopy and VATS are both efficient methods to prevent recurrences of PSP by pleurodesis either by talc, pleural abrasion, or both. Our group recently showed that the graded talc widely used in Europe is safe, cheap, and a very effective agent to achieve pleurodesis, contrary to the talc used in Brazil or the USA. This is true for both the treatment of malignant pleural effusions [8] and the treatment of PSP [9].

We further discussed new horizons in thoracoscopy. The technique can still be improved by the use of small-caliber thoroscopes or by the use of semirigid thoroscopes, which permit a smaller intercostal access, albeit at the cost of a certain loss of visual resolution.

Sedation during thoracoscopy has hardly ever been investigated. This is in stark contrast to several recent reports about conscious sedation in bronchoscopy. There is thus a need for prospective multicenter studies on this important topic.

Further suggestions for prospective trials were made for: (1) the enhanced diagnosis of pleural pathology using different sources of light or combining ultrasound and thoracoscopy to improve the diagnostic yield of the latter and (2) the better definition of the place of thoracoscopic talc poudrage, as compared to VATS with pleural abrasion, in the treatment of recurring pneumothorax.

As it is often the case, the most interesting part of the meeting took place outside of the formal scientific communications. Many people reported how difficult it is to implement new techniques in daily clinical settings. Sackner [10] recently described how flexible bronchoscopy was introduced into chest medicine in the 70s. He emphasized that 'the medical community often meets new ideas with rejection and skepticism. If the idea has merit, persistence and parsing the message into smaller bites generally lead to its acceptance'. Citing William Osler [11], he also said that every investigator needs serendipity and equanimity to be able to go on working on important objectives despite unjustified criticisms.

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