specimen quality in forceps biopsy and cryobiopsy, we found the cryobiopsy technique to have a superior diagnostic quality [3].

In summary, the use of the flexible cryoprobe for mechanical removal of obstructive exophytic bronchial tumours is a good alternative to laser therapy or electrocautery in planned bronchoscopic interventions as well as in patients with acute dyspnoea and tumorous bronchial obstruction. Cryorecanalisation is safe, cheap and readily applicable with an immediate success and relief of symptoms.

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From the authors:

I have read with great attention and interest the letter and comments by C. Schumann and co-workers about our review on cryotherapy, brachytherapy and photodynamic therapy, which was recently published in the *European Respiratory Journal* [1].

All studies into the relationships between cold and tissues underline the delayed action of cold: delayed vascular thrombosis then delayed necrosis. This point explains the delayed action of cryotherapy. The unique described immediate interaction between cold and tissue is the glue effect, which allows the extraction of foreign bodies. C. Schumann and co-workers have presented good studies on the use of newly designed flexible cryoprobes for obtaining large biopsies during flexible bronchoscopies. One of these studies was

indicated in our paper [2]. HETZEL *et al.* [3] also used this technique to perform immediate re-canalisation in cases of bulky tumours. We know this technique and its results well, and have shared discussion with the authors on several occasions about their experiences. However, it is true that in our paper we did not speak about this experience, and we would like to thank C. Schumann and co-workers for detailing their technique.

In our paper, these results were not reported for two main reasons. First, the aim of the paper was to review the methods of therapeutic endoscopy of delayed action, which explains why immediate action of these methods, including cryotherapy, was not detailed. The second reason is that the technique proposed by C. Schumann and co-workers is extremely original. In fact, to my knowledge, this method is not currently being used around the world. Therefore, we must consider that this new technique is in progress and further reports are needed. Haemorrhagic risks should be carefully analysed. Vessel thrombosis induced by cold is delayed by ~8 h. With immediate cryo-extraction proposed in this new technique, there is no possible coagulation and this method is closed to simple mechanical resection. Mechanical resection is widely used with a rigid bronchoscope where bleeding is easily controlled, but, with a flexible bronchoscope, this point could be crucial.

I hope that further papers by C. Schumann and co-workers will quickly confirm these preliminary results and give a new impulse for utilising cryotherapy.

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