increase raises a suspicion. Moreover, mean MVD was reported to be 80 in NSCLC using same methodologies [5]. Choosing an evaluation zone in a tumor stroma is another dilemma. Recently, increased tumor islet MCD in NSCLC noticed as favorable.

Finally, anti-angiogenic effect of tranilast occurs not by simply MC stabilization rather via its overall inhibiting effect on macrophage cytokine release, fibroblast, and smooth muscle proliferation. Only observing increased MCD in a tumor with bad/good prognosis on pathological specimens seems to be far behind to explain the role of MCs.

References


Reply to the Letter to the Editor

Reply to Ozdemir

Shinji Takai*, Toshihiko Ibaraki, Michiko Muramatsu, Mizuo Miyazaki
Department of Pharmacology, Osaka Medical College, Takatsuki City, Osaka 569-8686, Japan

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Keywords: Angiogenesis; Lung cancer; Chymase; Mast cells

The fact that mast cells are present in large numbers around cancers is well known; further, mast cells contain many angiogenesis factors. Many reports have indicated the involvement of mast cells in cancer angiogenesis. In our report, we demonstrated that chymase-positive mast cells are involved in angiogenesis around stage 1 non-small cell lung cancers suggesting that the possibility that chymase is involved in cancer angiogenesis [1]. However, Ozdemir et al. [2] found that mast cells which were differentiated from bone marrow mononuclear cells inhibited tumor cell growth in vitro and concluded that mast cells have antitumor activities.

Although Ozdemir cited reports that found no tumor suppression in mast cell-deficient mice, many reports, to the contrary, documenting tumor suppression in mast cell-deficient mice have been made. Also, he mentioned reports that, unlike our study, found no correlation between the number of vessels and the concentration of mast cells. These differences in outcome may suggest that the roles of mast cells differ depending on tumor type and progression. We have reported, using animal models, that local chymase injection strongly facilitates angiogenesis [3]. Recently, we documented that there was a strong correlation between the number of vessels and the concentration of chymase-positive cells around stomach cancers and that the postoperative survival rate for patients with high chymase-positive cell concentrations was lower when compared to patients with low chymase-positive cell concentrations [4]. These results strongly suggest the possibility that chymase facilitates angiogenesis, thus subsequently advancing cancer growth.

The functions of mast cells around cancers cannot be ascertained based solely on our results. However, based at least on our past studies, chymase-positive cells are involved in cancer angiogenesis. Yet, as stated by Ozdemir, mast cells contain many substances that facilitate angiogenesis and substances that are toxic to cancer cells. Hence, the roles of mast cells may differ depending on cancer differentiation and progression. Not all mast cells contain chymase, and its expression is seen in only about half the cells. Therefore, we would like to strongly emphasize that whether or not mast cells contain chymase is a very important point. However, clarifying the role of chymase-positive mast cells in angiogenesis and cancer growth will require clinical study using a chymase inhibitor.

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*Corresponding author. Tel.: +81 726 84 7292; fax: +81 726 84 6518.
E-mail address: pha010@art.osaka-med.ac.jp.
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Letter to the Editor

Early removal of chest drainage and outpatient program after videothoracoscopic lung biopsy

Juan J. Fíbla*, Laureano Molins, Javier Pérez, Gonzalo Vidal
Sagrat Cor University Hospital, Thoracic Surgery Department, Viladomat 288, 08029 Barcelona, Spain

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Keywords: VATS; Diffuse parenchymal lung disease; Lung biopsy; Day-case surgery
We read with interest the article by Molnar et al. [1] on the advantages of videothoracoscopic (VATS) lung biopsy (LB) using harmonic scalpel (HS) versus the traditional endostapler in two randomized groups. The average length of the procedure was 46.9 min for endostaplers versus 30.7 min for HS (16.2 min in favor of HS). However, at chest tube removal timing this tendency changed (30.6 h after LB with endostapler and 40.2 h after LB with HS). Mean hospitalization stays were similar (7.2 days for endostaplers and 7.6 days for HS). The conclusions were that the vibration method is not inferior to the standard technique and offers a safe alternative to endostapler LB.

We do not know how many of the patients included in the study by Molnar et al. [1] were oxygen-dependent or had an acute illness that may prolong their hospital stay after LB, but a mean stay of 7 days appears to be excessive. Moreover, a mean of 5 days after chest tube removal and discharge from the hospital. It is supposed that a shorter and safer technique should permit earlier chest tube removal and reduced hospital stay than the conventional procedure; however, this study showed no improvement in these terms. In our opinion, safe chest tube removal after LB can be performed earlier, and consequently hospital stays can be reduced significantly, even with the use of common endostaplers.

Russo et al. [2], in a prospective, nonrandomized trial demonstrated that chest tube removal within 90 min of VATS lung biopsy, in selected patients, could be accomplished safely. In another study, Blewett et al. [3] did not use chest tube drainage after open lung biopsy for diagnosis of interstitial lung disease. In 32 patients no complications occurred and no patient required overnight observation or hospital admission. Chang et al. [4] reported a series of 62 patients undergoing outpatient thoracoscopic LB with 5% of admissions. They concluded that outpatient thoracoscopic LB was safe and effective. In our group we have developed a policy of early removal of chest drainage after VATS LB since 1992. Of the 146 patients included, the chest tube was removed in 135 patients (92.4%) less than an hour after the procedure. In nine patients (6.2%) the chest tube was removed in 1—5 days, and in only two cases (1.4%) was the tube removed after the second postoperative day. Median hospital stay was 1.2 days (range: 0—7 days). There were 32 outpatient procedures since 2001. One patient was admitted because of air-leak. In the whole group of 146, postoperative hemotherax occurred in two patients (1.4%) and pneumothorax in three patients (2.0%). There were no re-admissions [5].

In conclusion, we think that it is positive to explore new techniques to minimize air-leaks. However, in our opinion, these developments should lead to specific goals: fewer postoperative complications and shorter hospital stay which in turn should result in improved cost-benefits.

References


Reply to the Letter to the Editor

Reply to Fibla et al.

Thomas F. Molnar*, Istvan Benko, Zalan Szanto, Terezia Laszlo, Ors Peter Horvath
Thoracic Surgery Division, Department of Surgery, Faculty of Medicine, University of Pécs, Pécs, Hungary

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Keywords: VATS; Lung biopsy; Day-case surgery; Medico-legal aspects

We thank Fibla et al. [1] for their letter. Answering their questions, first, we did not have oxygen-dependent patients nor acute cases in our randomized study [2]. It would not have been proper to enroll critically ill patients in a new technology project. The mean hospital stay calculated from the incriminated (‘excessively long’) 7 days is partly due to an unusually 2-day (1—5 days) long preoperative investigative period in our tertiary referral center with a waiting list less than 2 weeks. Our postoperative period ranging from 2 to 16 days with an average of 4.6 days, still can be regarded as unnecessarily long by those who focus exclusively on hospital stay. However, we consider other aspects equally important. Reducing operative time, improving specimen quality, avoiding metal clips, and patient’s safety were also among our aims. The particular circumstances of a certain procedure include not only medical aspects but also socio-legal aspects. If the existing legal/judicial system is a strongly patient friendly one — like ours — an even minor out-of-hospital postoperative complication can lead to the verdict of professional negligence. The hospital manager’s new mantra: 1 day surgery for reducing costs while increasing patient satisfaction. The result is an early discharge race. Nevertheless, sending home a patient is a double-edged sword. Should anything happen afterwards related (or supposedly related) to the previous procedure, the surgeon is at the mercy of the judge. Did anybody ever hear a hospital manager accused of pressing too hard his doctor? Ought we make our managers satisfied or should we make our patients and their lawyers happy? Are we still responsible professionals rather than health-care employees [3]? Are we still bound to the Hippocrates’ Oath—to protect our patients and defend ourselves? Obviously the answer is a very complex one. What we deny is a race in hours/days of tubing. Safety and patient appeasement are not exactly the same. How long should we keep the average patient in hospital to avoid that...