PERCUTANEOUS SCLEROTHERAPY OF MASSIVE VENOUS MALFORMATIONS OF THE FACE AND NECK USING FIBRIN GLUE COMBINED WITH OK-432 AND PINGYANGMYCIN

To the Editor:

This letter is in response to the article by Chen et al.1 titled “Percutaneous sclerotherapy of massive venous malformations of the face and neck using fibrin glue combined with OK-432 and pingyangmycin.” The authors present their results of using fibrin glue combined with OK-432 and pingyangmycin in this article. The patients were followed for 6 to 12 months with a mean follow-up time of 8.4 months. Twelve lesions were completely involuted, 4 lesions were mostly involuted, and 2 lesions were partially involuted. It is concluded that percutaneous sclerotherapy using fibrin glue combined with OK-432 and pingyangmycin is a simple, safe, and reliable alternative treatment modality for massive venous malformations of the face and neck.

The treatment of large venous malformations is difficult and challenging, although many methods are documented in the literature, including sclerotherapy using various sclerosing agents, surgery, laser therapy, and copper needle coagulation. The authors should be encouraged in using 2 drugs mixed with fibrin glue for treatment of large venous malformations. However, several problems existed in this clinical trial. The authors did not describe the size of the lesions; what are massive venous malformations? Are they determined by clinical measurement or imaging examinations such as B-type ultrasonography, CT, or MRI? In the outcome assessment, the authors should use the generally accepted 4-scale system described by Achaue et al.,2 and again, the assessment should be based on imaging changes before and after treatment, rather than by a panel of 3 surgeons. OK-432 has been extensively used for management of lymphatic malformations with good results,3 but rarely used for venous malformations. Without appropriate control (without OK-432) and experimental study, it is hard to speculate that the combination of OK-432 with pingyangmycin would have a cooperative or synergistic effect on the endothelial cells of venous malformations. Yang et al.4 reported about 7 patients with venous malformations in the oral and maxillofacial region treated by fibrin glue combined with pingyangmycin, 4 of 7 recovered to near-normal appearance, without any abnormal bloodstream detectable within the lesions. Their follow-up time was from 1 to 2 years.

For venous malformations larger than 5.0 cm in diameter or multiple lesions, our preferred treatment is endovascular interventional therapy using absolute ethanol under digital subtraction angiography (DSA) guidance performed by a team including surgeons, radiologists, and...
physicians. In our series, 17 patients (73.9%) achieved excellent responses and 6 patients (26.1%) achieved good responses in MRI assessments. Serious complications such as acute pulmonary hypertension, cardiovascular collapse, and pulmonary embolism were not encountered. For complicated and more difficult cases, combined therapy including sclerotherapy, laser therapy, and surgery should be utilized individually.

Reply:
We are most appreciative of the generous comments provided by Dr. Zheng Jia-wei in his response to our article regarding percutaneous sclerotherapy of massive venous malformations of the face and neck using fibrin glue combined with OK-432 and pingyangmycin. The diagnoses were based on the history of clinical presentations and 3-dimensional CT (3D-CT) angiography. Treatment success was determined clinically by a reduction in the lesion size; the lesions were measured by 3D-CT scan before and after treatment, photographed serially, and assessed by a panel of 3 surgeons.

Ogita et al first reported intrallesional injection with OK-432 for lymphangioma, and since then many authors have concluded through their experiences that OK-432 sclerotherapy may be an effective treatment for macrocystic lymphangiomas. We previously reported on patients with massive vascular malformations of the head and neck who were treated with injections of OK-432 and pingyangmycin. In our clinical trial, super-selective intra-arterial embolization followed by compartmentalization and the injection of OK-432 and pingyangmycin was a reliable alternative treatment for arteriovenous malformations of the soft tissues in the maxillofacial region. It is believed that the OK-432 and pingyangmycin are antineoplastic drugs in addition to sclerosing agents. OK-432 has the ability to interact directly with endothelial cells and inducing the apoptosis of malformed venous endothelial cells.

We thank Dr. Zheng for the sincere interest in our article.

REFERENCES