

首届大网膜移植中枢神经系统应用 国际专题研讨会

FIRST INTERNATIONAL CONGRESS OF OMENTUM IN CNS



论文汇编

ABSTRACT SYMPOSIUM

中 国 徐 州

XUZHOU CHINA

MAY 1995

祝大網膜醫學
研究更攀高峯

盛立題贈

一九九五年四月

热烈祝贺医学界
采用大网膜造福
于残疾人的重大
创新！
吴廷彪
一九七九年四月

中共江苏省委组织部离休干部

OPENING ADDRESS

to

The First International Congress of Omentum in CNS



Ladies and gentlemen, honorable guests and dear representatives:

It is really a pleasure and honor for me on behalf of the Preparatory Committee, who have contributed a great deal for the gathering, to announce that the First International Congress of Omentum in CNS now opens in Xuzhou city of Jiangsu province of China. The Committee and I are deeply touched on seeing our dear friends and colleagues, both at home and from abroad, in despite of long distance travelling, attend the present congress,

and we like to take this opportunity to extend our warmest welcome and heartfelt thanks to you all.

The number of representatives who registered to attend the session totals 120. They are from about 17 countries and regions throughout the world; except those from the P. R. China, they are from America, Britain, Canada, Cuba, Germany, Japan, Mexico, the Netherlands, Norway, Russia, Singapore, South Africa, Sweden, Switzerland, United Arab Emirates, Hong Kong and others. The papers submitted to the congress totaled 130 covering all aspects of omentum transplantation in CNS, i.e., basic research, clinical application, anesthesia, nursing and others. These papers convey the latest knowledge on the subject and the most advanced experience in its clinical application in a global scale. Hence we are warranted to say the present congress is a high-level international conference that will display the up to date achievements and information about the greater omentum in the CNS. It is our sincere hope that the present session be fully utilized for exchanging views, enhancing friendship, developing cooperation in research and joint efforts so as to promote the advance of omental surgery and benefit the health and welfare of the mankind as a whole.


Xuzhou as the host town of the session has a long cultural history dated back to the founding of Da—Peng State by Peng Zu in Yao regime in the early 21st century B. C. . Xuzhou, listed as one of the outstanding historical cultural cities by the State Council, is famous for its big collection of unearthed Han dynasty relics, such as mausoleums, the pottery underground troops and inscribed tablets. Xuzhou is also renowned for its special strategic importance in ancient and modern history of wars . It has a beautiful landscape, and now is the central-city of the eastern sector of the “Asia—Europe continental bridge” with convenient transports and flourishing economy. It is also the place where our College Hospital first succeeded in managing paraplegic patients by transplanting pedicled omentum to the spinal cord. Hence Xuzhou was chosen to host the present session for reasons.

The Preparatory Committee have been doing their best to provide logistics so that all our participants can concentrate themselves in the scheduled academic activities here and pleasantly enjoy themselves on touring the city and nearby scenic spots after the session.

Finally, I would like to express the true appreciation of the preparatory Committee to Prof . H. S. Goldsmith of Boston University for his enthusiastic support and valuable advice, and our heartfelt thanks to the Chinese Federation of the Disabled, Chinese Rehabilitation Research Association of Spinal Cord Injury, Jiangsu Provincial and Xuzhou Municipal Governments, and the relevant social bodies, institutions and individuals for their valuable support and generous help.

And I wish the First International Congress of Omentum in CNS a great success; with good health and brilliant prospects to all of our representatives and participants.

Thank you very much.

Chairman: 

Xuzhou, Jiangsu, China

May 7 1995



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首届大网膜移植中枢神经系统应用国际专题研讨会

开 幕 词

女士们、先生们，尊敬的宾客和亲爱的代表们：

经过紧张繁忙的筹备，首届国际大网膜移植中枢神经系统应用国际专题研讨会，今天在中国·江苏·徐州召开了。医学界的国际、国内朋友远涉重洋，不辞辛劳地光临会议，我和筹委会的各位先生不胜感激，谨代表本专题研讨会向与会各界朋友致以热烈欢迎和诚挚的感谢。

本届会议至今报名的代表有中国、美国、英国、德国、日本、加拿大、墨西哥、瑞士、瑞典、荷兰、挪威、俄罗斯、古巴、新加坡、南非、阿联酋、香港 17 个国家和地区 130 余名代表参加。共收到关于《大网膜基础理论研究》、《临床应用》、《麻醉》、《护理》及与此有关论述等五个方面的论文 150 余篇。这些文章理论深厚，实践丰富，内容广泛，代表了本次专题研讨会的国际最高水平和最新成果。因此，可以得出这样一个结论：本届会议是一次难得的大网膜移植中枢神经系统应用研究的高水平的国际盛会。我们希望，通过本届会议，研讨学术、切磋交流、广交朋友、建立友谊、弘扬医德、为民造福、把本专题研究的成果推向一个更高的水平。

徐州市政府和人民对各位代表的到来，表示热烈的欢迎和盛情接待。徐州为我国九州之一，古称彭城，自彭祖在唐尧时代受封于此，开创大彭氏国至今，也有四千余年历史。数千年历代文化遗迹，汉代墓穴、汉画、石像、兵马俑以及众多历代战争遗迹，遗址构成的徐州历史特色，是国务院批准的历史文化名城。今日徐州交通便利、经济发达、人才荟萃，是淮海经济区中心城市。

徐州医学院暨附属医院开展的大网膜移植中枢神经系统应用技术先行了一步，并取得了令人瞩目的成果。因此，徐州市为本专题研讨会的最佳会址。本会筹委会将尽大努力，以周到的服务使各位代表全心投入学术研讨。同时也将使各位代表浏览本地区古迹名胜，山月风光，城乡新姿，增进对古今徐州的了解。

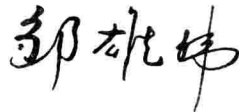
本届会议筹备过程得到了会议副主席美国波斯顿大学 Goldsmith 教授，中国残疾人联合会、中国脊髓损伤康复研究会、江苏省、徐州市政府、以及有关部门、社会团体、单位、个人的支持和赞助，在此，一并表示衷心的感谢。

敬祝：

首届大网膜移植中枢神经系统应用国际学术专题会圆满成功！

各位代表身体健康，事业有成！

会议主席：



一九九五年五月七日

中国·徐州

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PRELIMINARY RESULTS OF THE APPLICATION OF OMENTUM TO SEVERELY INJURED CANINE SPINAL CORD.

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Introduction.

Concussive injury to the canine thoracolumbar spinal cord occurs commonly. Dogs that lose conscious perception of crushing pain in the hind legs (deep pain negative) do not usually recover to walk. we have treated nine deep pain negative dogs by omental transposition.

Methods.

A standard dorsal (posterior) laminectomy was carried out and the spinal cord decompressed if indicated. The omentum was exposed by a paracostal laparotomy allowing a pedicel to be made of sufficient length to reach the exposed spinal cord. The omentum was placed on to the piamater and sutured to the reflected dura.

Results.

Four dogs recovered ability to walk by eight weeks post operatively of which one died suddenly at three months. One dog recovered ability to walk by one year. This dog remains very ataxic but walks in a coordinat fashion. It is still deep pain negative and is considered to demonstrate so called apinal walking.

One other dog died suddnly thirteen days after surgery. Three

others were destroyed because of failure to recover.

EXPERIMENTAL INVESTIGATION ON OMENTAL TRANSPOSITION IN SPINAL CORD ISCHEMIC INJURY—APPLICATION OF MAGNETIC STIMULATION MEP MONITORING

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14 dogs were divided into two groups, 7 for preligative omental transposition and other as normal. Observed the effect after occlusion of blood supply from T₁₃—L₁ at the 2 groups. The results revealed that the MEP, motor function and histological change for the omental transposition group were significant and better than the group which was not done the omental transposition. The results of the experiment concluded that omental transposition to the spinal cord provides extra blood supply to the damaged portion, thus alleviate the resultant pathological change after injury in retaining the motor function of the cord. MEP with magnetic stimulation is more reliable and safe method in monitoring motor function than SEP.

Key words: Spinal cord injury; Omental transposition; Magnetic stimulation; MEP

HRP STUDY ON THERAPEUTIC EFFECT OF TRANSPLANTATION OF OMENTUM GRAFT ON EXPERIMENTAL SPINAL CORD TRAUMA IN RATS

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Research Departments of Neuroanatomy and Neurosurgery,
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Twenty femal SD rats weighed 250—300g were paired by body weight with one in each going to the experimental group and the other to the control group. The paired animals were strictly put under the same experimental conditions.

The vertebral canal was opened and a quantified contusion was produced on to the spinal cord at T₁₁—L₁ segments through a falling weight that was manipulated by our selfdesigned programmed magnetic device, the strength of the strike being 20×2.5g. cm. Pedicled omentum graft was transplanted to the injured part of the cord in the experimental group, but not in the control. SEP after the operation gave a resting potential, showing paraplegia had been achieved.

Retrograde HRP study was carried out in the animals after 3—5 weeks of survival. Using a microsyringe 1.2μl of 30% HRP in 6 divided doses was injected into one side of the spinal cord, distal to the contused level, 0.6 mm from the midline, with a puncture depth of 2 mm. 48 hours later, the animals were sacrificed to make microsections of the midbrain according to Mesulam—Rosen's procedures. The microsections were put in the same multi—chamber reaction tray