

sured 43 sides of intra-articular synovial fluid pressure in the TMJs in 22 normal adult, using Philip's pressure measuring system. All results were treated statistically (range, $-22.3 \sim +6$ mmHg) and (1) There were negative pressure on opening of the mouth, protrusion of the jaw movement towards the contralateral side, chewing, swallowing, smiling, speaking as well as in a steady state, with the highest negative value during the chewing movement (mean, -11.86 mmHg). (2) There were positive pressure of the mouth on closing, retrusion and lateral movement of the jaw to the ipsilateral side, with the highest positive value during mouth closing (mean, 2.88 mmHg). (3) When in the resting position, the mean TMJs pressure was -2.87 mmHg. (4) Only during opening movement TMJ pressure were statistically different between male and female. (5) No different joint pressure between bilateral TMJs were showed.

Subject headings temporomandibular joint; synovial fluid pressure; measurement

· 新 成 果 ·

成年动物创伤性大脑皮质神经细胞分裂的研究

课题负责 黄连碧

(中山医科大学组胚教研室; 广州, 510089)

该成果应用同位素标记法、神经元特异的烯醇化酶和神经免疫组化等现代技术对成年大鼠大脑皮质顶叶, 在创伤区附近正常脑组织内发现神经细胞出现有丝分裂, 亦发现在损伤区旁有部分神经之间期核被标记, 证实分裂的神经元, DNA 改制期形态仍呈锥体形, 推测有丝分裂可能发生于大脑皮质原位。与损伤区相邻的室管膜下层未见有神经元或神经元分裂, 故神经元分裂的细胞可能不是从室管膜下层迁移来的。从而确定了大脑皮质神经元分裂像的特征与分裂神经元的主要分布范围。确认分裂的神经元是来自原位的神经元, 修正了成年哺乳动物神经元不可分裂的观点结果可靠, 为中枢神经在损伤条件下可以再生提供了实验依据。成果具国内领先水平, 1994 年获国家教委科教进步奖二等奖。

(陈丽芳)

肝豆状核变性(Wilson disease)的系列研究

课题负责 梁秀龄

(中山医科大学附属第一医院神经科; 广州, 510080)

该课题自 80 年代初开展肝豆状核变性(wilson disease WD)的研究以来, 至今已对其临床表现、生化、病理、影像学、发病机理、遗传、诊断和治疗等进行了层层深入的系列研究, 率先总结了 WD 患者皮肤色泽、骨关节 X 线、头颅 CT 的改变, 填补了中国该病临床遗传学分析和多器官超微病理学研究空白, 发现 WD 离体培养细胞中的金属硫蛋白具有原发的高铜亲和力与高诱导性两种异常, 总结了临床误诊的经验教训。建立了高铜卵育后皮肤成纤维细胞内铜含量测定和采用多种 DNA 探针进行基因型检测方法, 确定了金属硫蛋白在该病发病机理中的基本作用和中国该病基因的精确位置, 研究全面、系统、深入, 设计科学、严密, 在多方面填补了国内空白, 并达国际先进水平, 1994 年获国家教委科技进步奖二等奖。

(陈丽芳)