

in bioassay of glucagon (the rabbit blood glucose assay), oxytocin (the rat uterus contraction assay), argipressin (the rat blood pressure assay) and so on. If each subject is to be used 6 times, an (3,3) assay using 6 litters of 6 animals might be arranged as the 6 × 6 Latin square design. Fisher and Yates⁽⁸⁾ have provided adequate tables of Latin squares.

REFERENCES

- 1 Ke RL, Shen GQ, Liu QL. Biological assay of insulin by blood glucose determination in mice. *Chin J Pharm Anal* 1984; 4 : 74
- 2 Finney DJ. *Statistical method in biological assay*. 3rd ed. London : Charles Griffin, 1978: 209-15
- 3 Lin ZG, Liu QL, Guo H, Ke RL. Bioassay of insulin by the estimation of blood sugar in mice; Determination of blood sugar by GOD method estimation. *Chin J Pharm Anal* 1985; 5 : 333
- 4 Lin ZG, Zhou HJ. Application of Latin square design in mouse insulin assay by blood sugar method. *Chin Pharmacol Bull* 1989; 5 : 115
- 5 Lin ZG, Zhou HJ. The computer program for Latin square design of statistical analysis. *J Biochem*

Pharm 1988; (4) : 32

- 6 Pharmacopoeia Commission of the Ministry of Public Health of PRC. *Pharmacopoeia of the People's Republic of China*. Hong Kong: China Pharmaceutical Books Company, 1988 : A 73-5
- 7 周海钧, 申蕴如, 主编. 生物检定统计方法. 第2版, 北京: 人民卫生出版社, 1988: 161-73
- 8 Fisher RA, Yates F. *Statistical table for biological, agricultural and medical research*. 6th ed. London: Oliver & Boyd, 1963 : 86-9

拉丁方和双交叉设计小鼠血糖法测定胰岛素效价的比较

林志共、周海钧 (中国药品生物制品检定所, 北京 100050, 中国)

摘要 根据平行线原理, 应用拉丁方设计小鼠血糖法测定胰岛素效价。4至6组 4 × 4 拉丁方测定 80, 100 和 120% 含量的标准品, 其回收率在 95-106%, 测定 13 批不同制剂的胰岛素样品, 包括超过有效期的样品, 同时和双交叉设计比较, 结果表明, 两种设计效价测定几乎相同, FL% 均能在 25% 以下, 但拉丁方设计能节约 40% 左右的动物, 是一种精确的测定胰岛素效价方法。

关键词 研究设计; 生物测定; 血糖; 胰岛素

中国药理学报 *Acta Pharmacologica Sinica* 1990 Sep; 11 (5) : 457-459

可乐定对实验性大鼠胃溃疡的作用

罗贯一、何云、涂羚波 (江西大学生理教研室, 南昌 330047, 中国)

Effects of clonidine on experimental stomach ulcer in rats

LUO Guan-Yi, HE Yun, TU Ling-Bo
(Department of Physiology, Jiangxi University, Nanchang 330047, China)

ABSTRACT Clonidine 2 mg/kg ig inhibited the rat gastric ulcers induced by pyloric ligation, stress and indomethacin by 71%, 77% and 82%, respectively. Clonidine 2 mg/kg ig tended to accelerate the healing of gastric ulcer induced by acetic acid, and the healing rate was 61%. Clonidine decreased the

secretion of gastric acid and pepsin, and increased the release of gastric barrier mucus. These actions may contribute to its protective effect against ulceration.

KEY WORDS clonidine; stomach ulcer; gastric acid; pepsin; gastric juice

摘要 可乐定 2 mg/kg ig 可抑制大鼠幽门结扎、应激性及吲哚美辛诱发的胃溃疡, 其抑制率分别为 71%, 77%, 82%, 并可促进醋酸胃溃疡愈合, 其愈合率为 61%。可乐定还可减少胃酸和胃蛋白酶的分泌, 增加胃壁结合粘液的分泌, 这些作用可能与其抗溃疡效应有关。

Received 1990 Jan 8 Accepted 1990 May 9

关键词 可乐定; 胃溃疡; 胃酸; 胃蛋白酶; 胃液