Hormonal Responses and Anatomical changes after pancreaticoduodenectomy in dogs: Comparison between Classic Whipple and Pylorus-Preserving Pancreaticoduodenectomy

Abstract

Background: Pancreaticoduodenectomy is the most complicated surgical procedures for periampullary lesion. Many modified procedures have been advocated to prevent postoperative complications and to improve postoperative nutritional status. Pylorus-preserving pancreaticoduodenectomy is the procedures revived by Langhine and Traverso in 1978. However, high incidence of early delay gastric emptying developed in these patients underwent operation. Some etiologies have been discussed but the change of gastrointestinal hormones is still necessary to be elucidated.

Purpose: The purpose of our studies is to investigate the correlation of the change of gastrointestinal hormones to delay gastric emptying.

Study design: Our study divided 24 canines into three groups to receive subtotal gastrectomy, standard pancreatic-duodenectomy, and pylorus-preserving pancreaticoduodenectomy respectively. 10ml blood was withdrawn from these canines at the schedule as following: preoperatively, 1st day, 3rd day, 5th day, 7th day, 14th day, 21st day, 28th day, 3 month postoperatively. After centrifugation under 3000 rpm, 4°C for 15 min, we collect serum to estimate the level of gastrin, cholecystokinin, motilin by radio immunoassay method (RIA).

Result: For the shortage of space for keeping these canines at the same time, our study is still on going at present.

Keywords: Pancreaticoduodenectomy, Whipple, PPPD, Gastrin, Cholecystokinin

一、中文摘要

胰十二指腸手術是治療壺腹區腫瘤的重要方式，而潰瘍保留式胰十二指腸手術是為避免術後遺症及改善術後營養狀況而發展的手術，但是本方式有較高的胃遲延性排空，增加病患住院時間。本院自開院以來，接受胰十二指腸手術的病人日漸增多，每年約有 20 例的手術案例，已屬高容量手術的醫院，而接受改良潰瘍保留式胰十二指腸切除病患產生延遲性胃排空病患高達 40%，本計劃即欲分析術後胃腸道功能改變和延遲性胃排空的相關性。

二、緣由與目的

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三、結果與討論

目前本計劃所完成的動物數不達計劃中所需之數目，實驗仍在進行中，初步結果如同臨床上所見，潰瘍保留式胰十二指腸切除的動物有較高的延遲性胃排空。

四、參考文獻

1. Lin PW, Lin YJ. Prospective randomized


