



UNIVERSITI PUTRA MALAYSIA

***A RETROSPECTIVE ANALYSIS OF ACUPUNCTURE PRACTICE IN
DOGS IN SELECTED VETERINARY CLINICS IN KLANG VALLEY***

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**A RETROSPECTIVE ANALYSIS OF ACUPUNCTURE PRACTICE IN
DOGS IN SELECTED VETERINARY CLINICS IN KLANG VALLEY**

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A project paper submitted to the
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CERTIFICATION

It is hereby certified that I have read this project paper entitled “A retrospective analysis of acupuncture practice in dogs in selected veterinary clinics in Klang valley”, by Goh Joy Xine and in my opinion it is satisfactory in terms of scope, quality, and presentation as partial fulfilment of the requirement for the course VPD 4999–Final Year Project.

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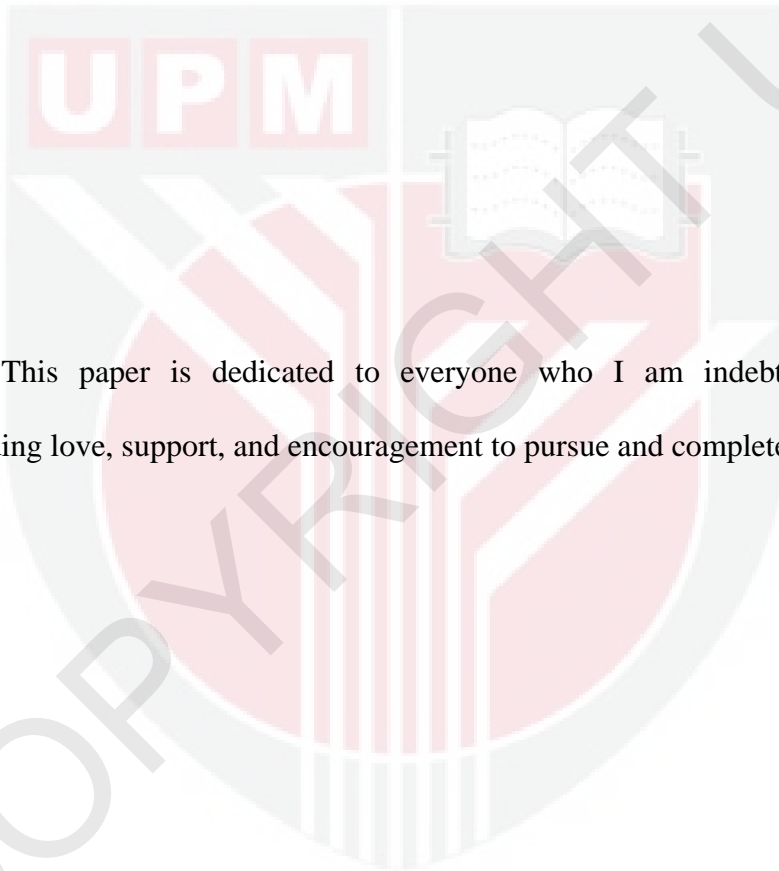
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(Supervisor)

DEDICATIONS

This paper is dedicated to everyone who I am indebted for their unyielding love, support, and encouragement to pursue and complete my study.



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CONTENTS

	Page
TITLE	i
CERTIFICATION	i
i	
DEDICATIONS.....	iii
ACKNOWLEDGEMENTS.....	iv
CONTENTS	v
LIST OF TABLES.....	vii
LIST OF FIGURES.....	vii
LIST OF ABBREVIATIONS.....	viii
ABSTRAK.....	ix
ABSTRACT.....	xi
1.0 INTRODUCTION.....	1
2.0 LITERATURE	
REVIEW	5
2.1 Common Problems Presented for Acupuncture in Dogs	
2.2 Efficacy of Acupuncture in Dogs	
3.0 MATERIALS AND METHODS	8
3.1 Site Selection	
3.2 Case Selection	
3.3 Data Collection	

3.4 Data analysis

vi

4.0	RESULTS.....	10
5.0	DISCUSSION.....	22
6.0	CONCLUSION.....	27
7.0	LIMITATIONS AND RECOMMENDATIONS.....	28
	REFERENCES.....	29

LIST OF TABLES

	Page
Table 1	Age group distribution for canine acupuncture cases.....10
Table 2	Breed distribution of canine acupuncture cases.....11
Table 3	Neurological problems presented for acupuncture in dogs.....14
Table 4	Orthopaedic problems presented for acupuncture in dogs.....17

LIST OF FIGURES

Figure 1	Size categories of canine acupuncture cases.....11
Figure 2	Chief complaints of canine acupuncture cases.....13
Figure 3	Breed distribution of patients with neurological problems.....15
Figure 4	Neurological problems in Toy Poodle.....15
Figure 5	Neurological problems in Shih Tzu.....16
Figure 6	Breed distribution of patients with orthopaedic problems.....17
Figure 7	Concurrent treatment with veterinary acupuncture.....19

Figure 8 Subjective treatment outcome of acupuncture treatment.....20

Figure 9 Acupuncture techniques used in dogs.....21

viii

LIST OF ABBREVIATIONS

TCM Traditional Chinese Medicine

IVAS International Veterinary Acupuncture Society

IVDD Intervertebral disc disease

FCE Fibrocartilagenous Embolism

ABSTRAK

Abstrak daripada kertas projek yang dikemukakan kepada Fakulti Perubatan Veterinar untuk memenuhi sebahagian daripada keperluan kursus VPD 4999–Projek Akhir Tahun.

PENELITIAN RETROSPEKTIF AKUPUNKTUR DALAM ANJING DI KLINIK TERPILIH DI LEMBAH KLANG

Oleh

Goh Joy Xine

2018

Penyelia: Dr. Intan Nur Fatiha Shafie

Akupunktur telah digunakan secara meluas sebagai adjuvan dalam konvensional perubatan veterinar. Oleh sebab kekurangan data mengenai akupunktur veterinary dalam anjing di Malaysia, kajian retrospektif telah dijalankan untuk mendokumenkan maklumat berkaitan dengan distribusi kes, kaedah akupunktur, rawatan serentak dengan akupunktur, hasil rawatan subjektif dan kesan sampingan dalam kalangan anjing yang menerima rawatan

akupunktur. Rekod perubatan anjing yang menerima rawatan akupunktur dari dua klinik veterinar terpilih yang mempunyai pakar akupunktur bersijil di Lembah Klang dari

x

Januari hingga Disember 2017 telah dikaji. Data seperti maklumat pesakit, tanda-tanda sakit yang biasa, rawatan serentak, hasil rawatan dan kesan sampingan akupunktur telah dikumpul dan dianalisis dengan menggunakan cara statistic deskriptif.

Sebanyak 194 kes akupunktur dalam anjing telah direkodkan. Kebanyakan anjing yang menerima rawatan terdiri daripada kumpulan geriatri (71%). Baka anjing kecil merangkumi 49% daripada keseluruhan kes akupunktur. Penyakit yang paling biasa dirawat dengan akupunktur ialah masalah neurologi (40.9%) diikuti dengan masalah ortopedik (27.4%). Kebanyakan masalah neurologi ialah penyakit cakera intervertebral (IVDD) (56.3%) manakala kebanyakan masalah ortopedik ialah penyakit arthritis (46.3%).

Sebagai kesimpulan, kajian ini menggambarkan penggunaan akupunktur veterinar dalam anjing di Lembah Klang. Maklumat ini akan berguna apabila merancang kajian keberkesanan akupunktur pada masa akan datang.

Kata Kunci: akupunktur veterinary, anjing, ortopedik, neurologi

ABSTRACT

An abstract of the project paper presented to the Faculty of Veterinary Medicine
in partial fulfilment of the course VPD 4999 – Final Year Project.

**A RETROSPECTIVE ANALYSIS OF ACUPUNCTURE PRACTICE IN
DOGS IN SELECTED VETERINARY CLINICS IN KLANG VALLEY**

By

Goh Joy Xine

2018

Supervisor: Dr. Intan Nur Fatiha Shafie

Acupuncture has been widely used as an adjunct to conventional western veterinary medicine. Due to lacking of data on veterinary acupuncture in dogs in Malaysia, a retrospective study was carried out to document the distribution of acupuncture cases, acupuncture methods used, concurrent treatments with

acupuncture, subjective outcomes and side effects in dogs treated with acupuncture. Medical records of dogs underwent acupuncture therapy at two selected veterinary clinics with the certified acupuncturists in Klang Valley from January to December 2017 were reviewed. Data on signalments, common presenting signs, concurrent

xii

treatments, treatment outcomes, and side effects of acupuncture were retrieved and were summarised as descriptive statistics.

A total of 194 acupuncture cases in dogs had been recorded. Patients presented were mainly composed of the geriatric group (71%). Small breed dogs made up 49% of the overall acupuncture cases. The most common chief complaints presented were neurological problems (40.9%) followed by orthopaedic problems (27.4%), with intervertebral disc disease (IVDD) (56.3%) and arthritis (46.3%) being the predominant issues respectively.

In summary, this study visualized the use of veterinary acupuncture in dogs in Klang valley and the information will be useful for designing efficacy study in the future.

Keywords: veterinary acupuncture, dog, orthopaedic, neurological

1.0 INTRODUCTION

Acupuncture is one of the principal treatment in Traditional Chinese Medicine (TCM). For the purposes of this study, the term acupuncture is defined as the insertion of a solid needle into the body for therapy, maintenance of health, or prevention of disease (Acupuncture Regulatory Working Group, 2003). This needle is inserted at specific points on the body, which are known as acupoints or acupuncture points. In traditional Chinese medical theory, these points communicate with the internal organs by the way of meridian and its collateral. If an acupoint becomes tender, it may reflect pathophysiologic changes of a related organ which can be issued by applying acupuncture on that acupoint. The concept of interaction between acupoints and organs resembles the western medical concept of viscerosomatic and somatovisceral reflexes (Hwang & Egerbacher, 2001).

From a neurophysiologic point of view, the traditional acupuncture could be redefined in a number of mechanisms, mainly the neural mechanism and inflammation mechanism. For instance, stimulation of peripheral nerve evoking

pain inhibitory system by needling at acupoints can produce an analgesic effect. Needling will also induce microtrauma, which stimulates local inflammation and vasoactive effect. The vasoactive effects of acupuncture can improve local tissue perfusion and heighten local tissue immune status (Steiss, 2001).

2

There are a few other techniques that often are subsumed under the term “acupuncture” such as dry needle acupuncture, electroacupuncture, laser acupuncture, or acupressure (Filshie & White, 1998). In this study, focus will be given mainly on dry needle acupuncture and electroacupuncture. Dry needle acupuncture is the application of solid needle alone at acupoints with no intentional introduction of haemorrhage (Rose, 2016). Electroacupuncture is the technique which the dry needles are connected to the electroacupuncture machine via the attachment of electrical leads to the needles at the acupoints. The frequency and amplitude of the electrical energy applied to the acupoints can be controlled using the machine and this will result in more effective stimulation if compared to dry-needle alone (Xie & Ortiz-Umpierre, 2006).

Acupuncture has been integrated into veterinary practice since 659 BCE. In 1974, with the formation of the International Veterinary Acupuncture Society (IVAS) that started to offer veterinary training and promote clinical uses of acupuncture, veterinary acupuncture has been receiving greater acceptance globally, resulting in increased research on the mechanism and efficacy of acupuncture in animals. A recent PubMed search using keyword “veterinary

acupuncture” produced over 427 papers on veterinary acupuncture (PubMed, 2018), which provide evidence to validate the application of veterinary acupuncture and support the safety of acupuncture treatment (Xie & Wedemeyer, 2012).

3

Surprisingly, many animals can tolerate the acupuncture treatment remarkably well. This could be the result of the production of mood-altering neurotransmitters during and immediately after the treatment (Scott, 2001) which facilitates the relaxation response of the patients. Hence, the owners are more willing to visit the clinic for treatment as there is no indication of distress and their pets appear to make positive associations with their visit to the clinic (Lindley & Cummings, 2006). On the other hand, the relaxation response also aids in enhancing the responsiveness of the body to acupuncture treatment (Chang *et al.*, 2010). For that reason, it is important for practitioners to create a relaxing therapeutic environment for the patients.

To treat diseases with acupuncture, TCM diagnosis will first to be made followed by the selection of appropriate acupoints. The canine acupuncture atlas written by Hwang and Limehouse (2001) contains 136 acupoints that are listed according to the meridian numbering system together with information concerning the anatomical location, cutaneous nerve innervation of the points and therapeutic indications. Christman and Xie (2007) also reviewed transpositional acupoints in dogs with locations of useful skeletal landmarks to

localize the acupoints. In each session of acupuncture treatment, the needle will be left for ten to twenty minutes. Weekly or a twice-weekly treatment usually will be carried out for the first four to six weeks (Scott, 2001).

4

Although there is a general impression on veterinary acupuncture are becoming increasingly popular, the up-to-date data regarding the patient population, presenting complaints, and therapeutic modalities of veterinary acupuncture practice in our local veterinary community have not been described. Therefore, a preliminary study is necessary to review the application of veterinary acupuncture and preparing database for future efficacy studies.

The objective of this study is:-

- 1) To document data on distribution of cases, acupuncture methods used, concurrent treatments with acupuncture, subjective outcomes and side effects in dogs underwent acupuncture therapy

preparing proper documentation for the clients should be encouraged in our local veterinary community as it will not only benefit the data collection for future study but also enable both clients and other veterinarians to trace back the type of treatment and diagnostic procedure that had been done on the patients. This could help in planning for further diagnosis and treatment as well as to prevent medical issues such as antibiotic resistance. Consequently, this culture will definitely benefit the whole industry.

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30

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