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## "THE EFFECT OF GABA ANTAGONISM ON OPIOID POTENTIATION: APOSSIBLE MECHANISM OF TRAMADOL ANALGESIA"

Thesis Submitted for partial fulfillment of M.D. in Anesthesiology and Algology

Presented by Monzer Mahmoud Faiad M.B.B. CH & M.Sc

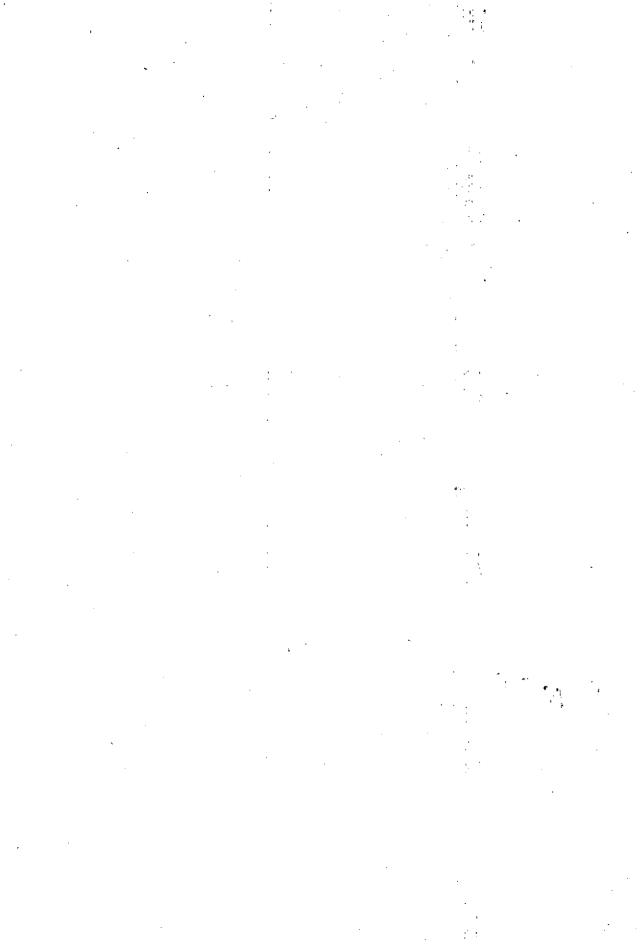
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#### ABSTRACT

In the present study, we explored possible anti GABA effects which may accompany Tramadol HCL action in therapeutic doses (clinically) GABAA antagonism can potentiate morphine analgesic effect and in Supra therapeutic doses (pharmacologically).

Clinically: the work is based on giving Tramadol versus morphine as post operative analgsia via PCA, half of admitted patients will be premedicated with midazolam versus placebo, and again half of the out coming patients will receive either Tramadol or morphine plus flumazenil (GABAA antagonist) and the other half will receive Tramadol or morphine without flumazenil. Then post operative assessment of vital functions, degree of pain relief score and side-effects at fixed time intervals.

Pharmacologically: I. Experiment for Behavioral responses of rats to assess alertness, mobility and reaction to auditory stimuli.

II. Experiment for Convulsive responses of rats: by giving convulsive doses either of picrotoxin, or Tramadol with or without flumazenil then assessing time and number of tremors and convulsions in certain time.

Key words:

Clinical: Pain: postoperative. Analgesics: morphine versus Tramodol HCL. Adjuvants: flumazenil. Premedication: midazolam. Analgesic Technique: PCA.

Drugs: Tramadol HCL, picrotoxin, Pharmocological: midazolam, flumazenil. Techinque of administration: intra peritoneal bolus, Test experiments: behavioral and convulsive. GABA Antagonism. Tramadol Analgesic Potentiation.



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#### CONTENTS

CHAI	PTER	PAGE			
I.	INTRODUCTION AND AIM OF THE WORK	1			
II.	REVIEW OF LITERATURE				
	- Opioid	3			
	- GAMMA Amino Busyric Acid (GABA)	18			
	- Tramadol and Pain Relief	31			
	- Post-operative Pain management	53			
III.	MATERIAL AND METHODS	65			
IV.	RESULTS				
	- Pharmacological	73			
	- Clinical	87			
V.	DISCUSSION				
	- Pharmacological	102			
	- Clinical	103			
VI.	CONCLUSIONS	114			
VII.	SUMMARY	116			
VIII.	REFERENCES	118			
	ARABIC SUMMARY				

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