

Toxicological Profile of Glue Sniffing in Experimental Animals

*Thesis Submitted for Partial Fulfilment of Master Degree of
Clinical Toxicology*

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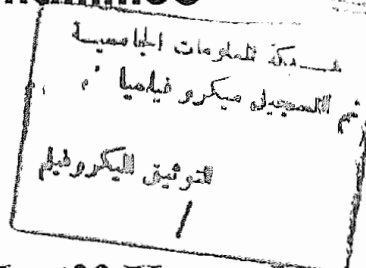
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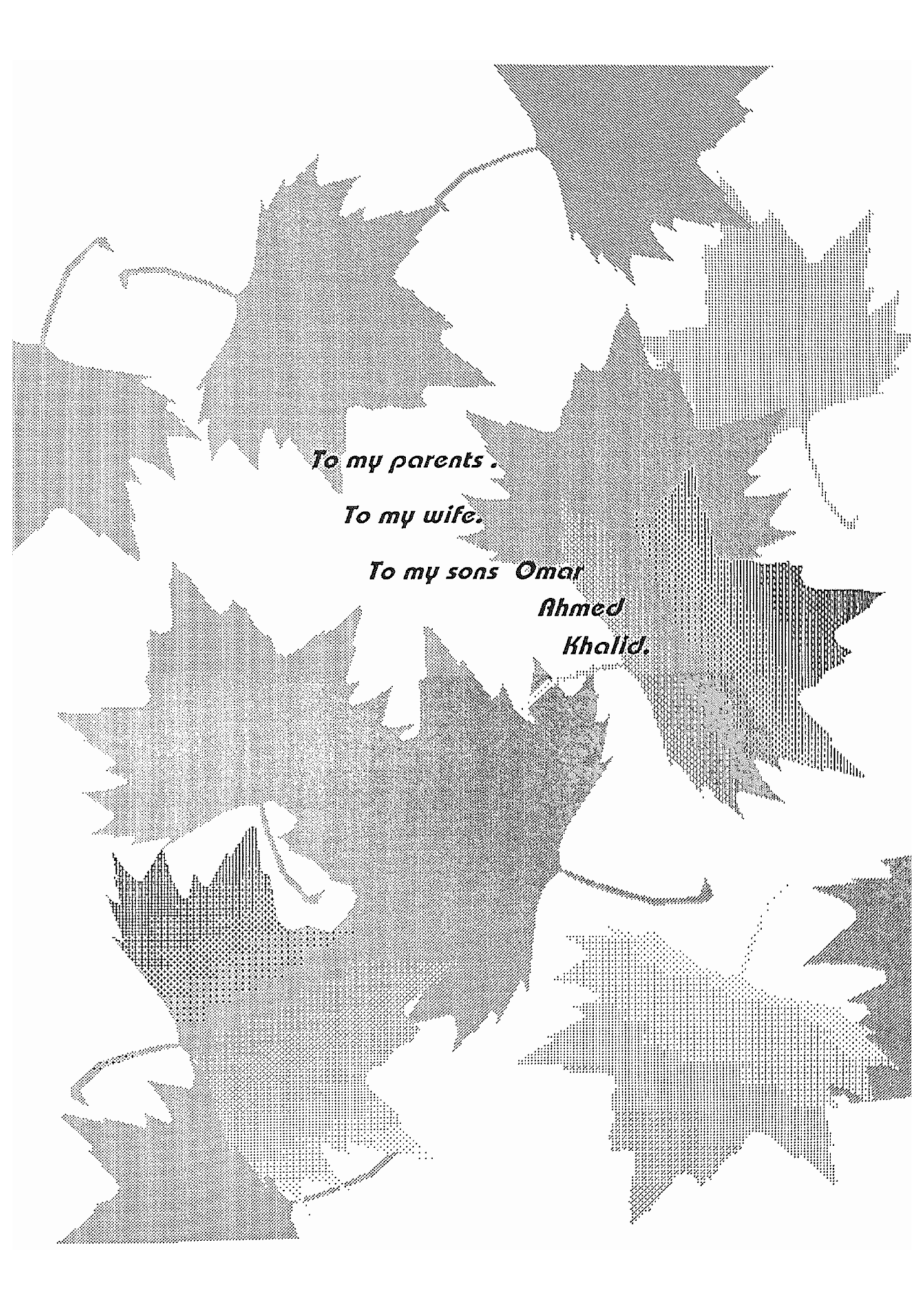
Handwritten signatures and notes in Arabic, including 'أحمد عيسى' (Ahmed Issa) and 'أحمد كمال' (Ahmed Kamel).

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

” قَالُوا نَسِخَانِكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا
إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ “

صدق الله العظيم
سورة البقرة - آية ٣٢





To my parents .

To my wife.

To my sons Omar

Ahmed

Khalid.

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LIST OF ABBREVIATIONS

ACGH	American Conference of Government Industrial Hygiene.
CESARS	Chemical Evaluation Search and Retrieval System.
HSDB	Hazardous Substances Data Bank.
NIOSH	National Institute for Occupational Safety and Health.
RTECS	Registry of Toxic Effects of Chemical Substances.
mEq/L	Milliequivalent per litre.
mg%	Milligram percent.
u/l	unit per litre.
AST	Aspartate Transaminase.
ALT	Alanine Transaminase.
PEEP	Positive End Expiratory Pressure.
CT	Computed Tomography.
MRI	Magnetic Resonance Imaging.
RTA	Renal Tubular Acidosis.

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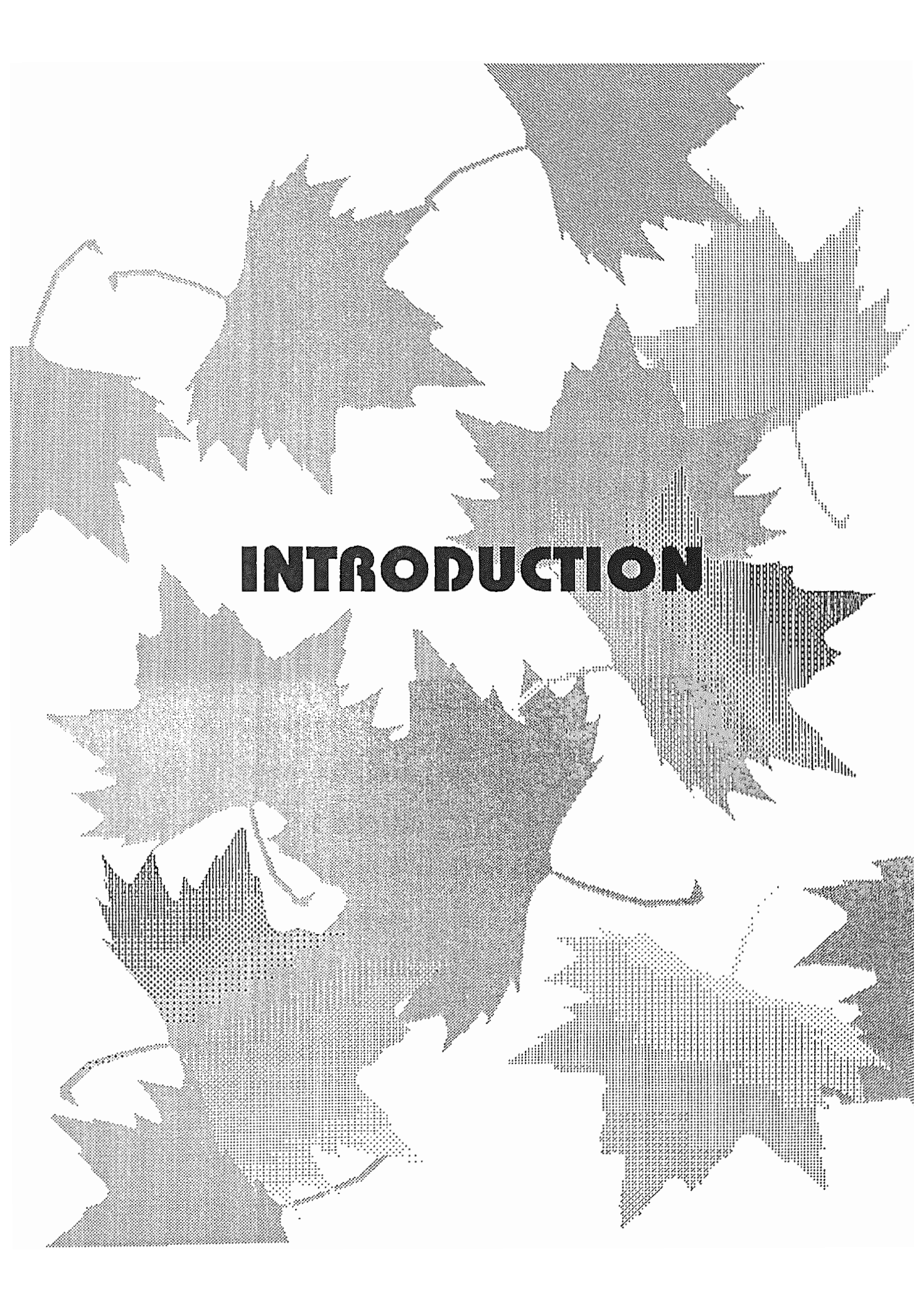
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INTRODUCTION

INTRODUCTION

Solvent abuse is a potentially lethal practice that involves a wide range of volatile, fat soluble substances which easily cross from gaseous phase in the lungs to the blood and subsequently to the lipids of the brain, organs and body fat. Once within the brain, these compounds can disrupt it's function by affecting neuronal membrane ion channels and may cause changes in consciousness ranging from mild intoxication through hallucinatory states to coma with cardio-respiratory depression.

True dependence may occur, and the development of isolated, solitary sniffing practices may be indicative of increasing dependence. The management of this problem depends on the recognition and treatment of underlying psychological problems. Solvent abuse is generally a habit of young teens, but may be persist into the mid-twenties. Peer group pressure may be an important factor

Legislation seems unlikely to affect the prevalence of solvent abuse due to the large number of chemicals involved and their widespread use in the home and industry. Perhaps the most useful