# UROFLOWMETRY IN EGYPTIAN MALES OF DIFFERENT AGE GROUPS (EGYPTIAN NOMOGRAM)

Thesis
Submitted For Partial Fulfillment Of The Master Degree
In Urology


***By***

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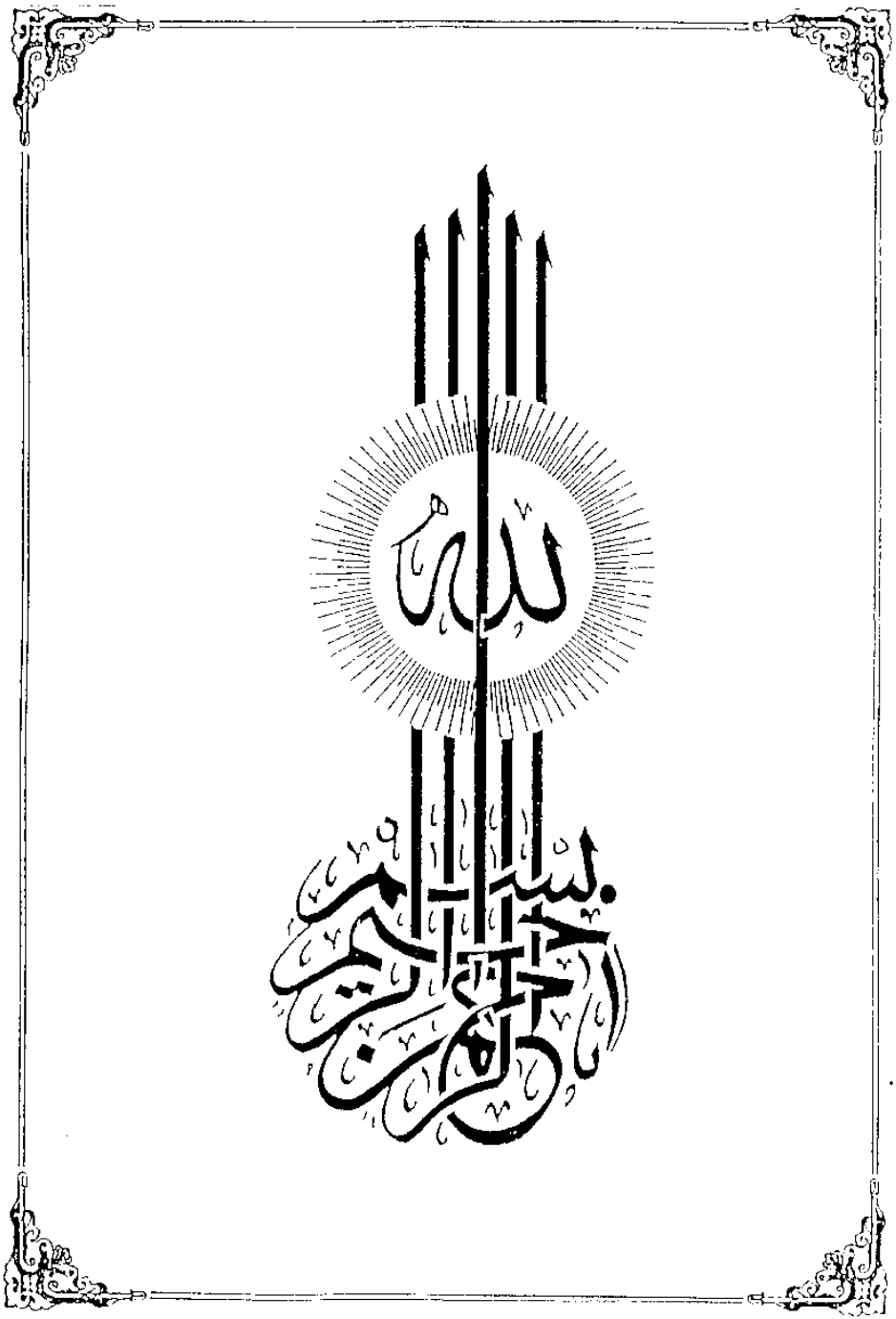
**1998**



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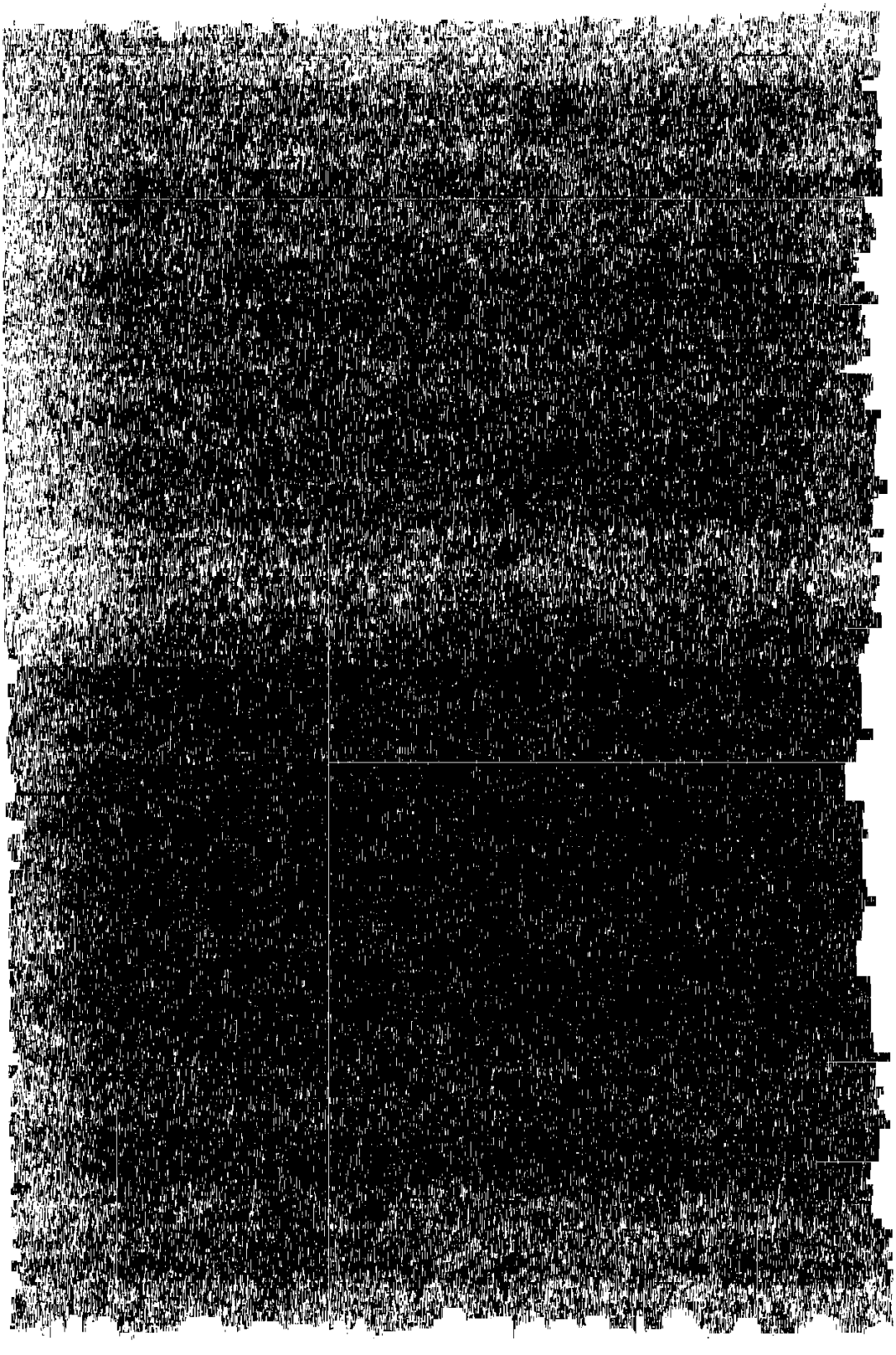
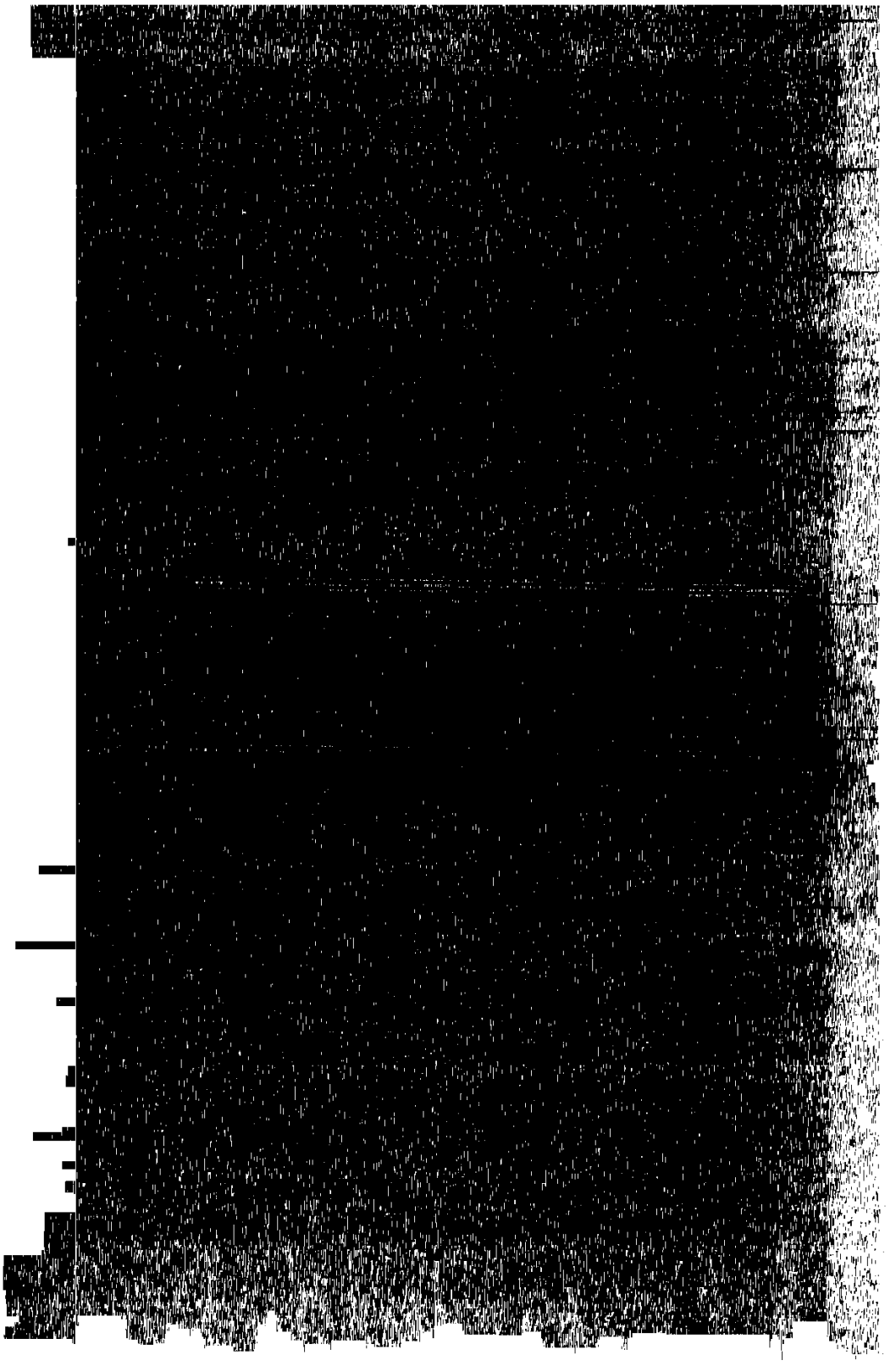


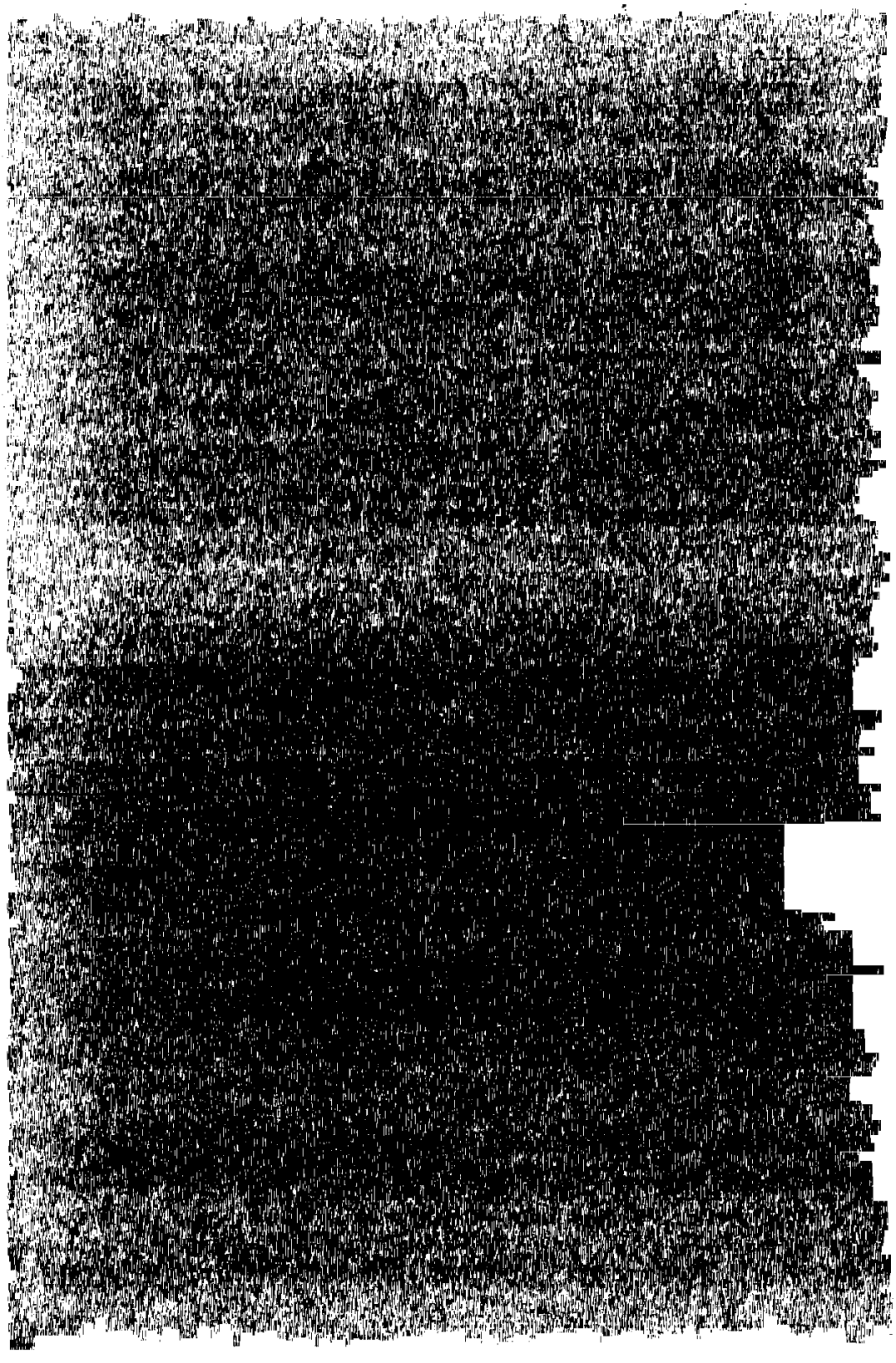
# INTRODUCTION

The urinary flow rate is the graphic representation of the integration of the detrusor contraction and outlet resistance.[98] In assessing whether a flow rate is normal or not, consideration to both age and sex is important. Some have suggested that nomograms be standardized for age and sex, whereas others have demonstrated no differences.[34]

Some agreement exists about normality because Q max greater than 15 ml/s is considered unobstructed, whereas, Q max less than 10 ml/s is considered obstructed.

***Gammelgaard*** described a decline in Q max from 35 ml/s at the age of 14 years to 15 to 20 ml/s at the age of 50 years[44]. From the studies on younger normal persons one to two decades ago, one can deduce that Q max declines 1 to 2 ml/s/5 years and to a certain degree depends on the voided volume.[98]





# AIM OF THE WORK

The aim of this study was to establish normal reference ranges for the maximum and average urine flow rates over a wide range of voided volumes and in the form of nomogram charts for Egyptian males of different age groups.