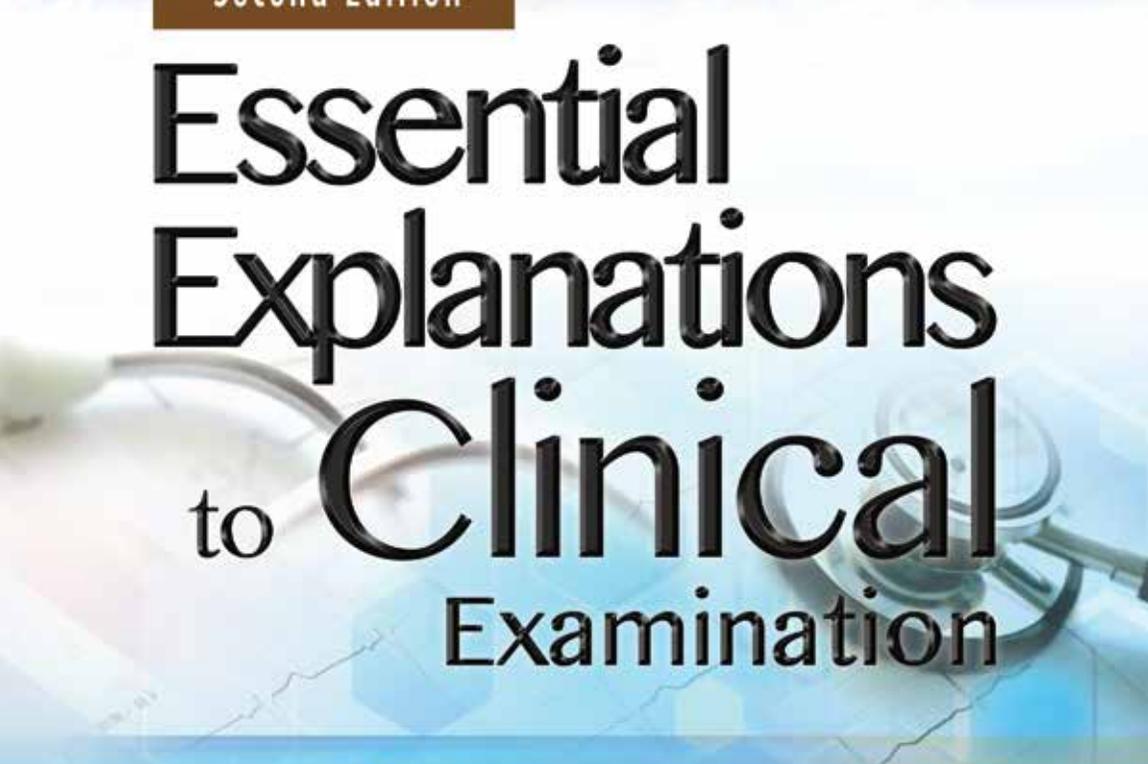




P T THOMAS

Second Edition

Essential Explanations to Clinical Examination



Second Edition

Essential
Explanations
to **Clinical**
Examination

Second Edition

Essential
Explanations
to **Clinical**
Examination

P T THOMAS

Universiti Malaysia Sarawak
Kota Samarahan

© P T Thomas, 2017

All rights reserved. No part of this publication may be reproduced, stored in retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher.

Published in Malaysia by
UNIMAS Publisher,
Universiti Malaysia Sarawak,
94300 Kota Samarahan,
Sarawak, Malaysia.

Printed in Malaysia by
Malien Press Sendirian Berhad
Unit E1-9 G/FL, Sublot 9,
Jalan Petanak
93100 Kuching,
Sarawak, Malaysia.

Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

Thomas, P. T.

Essential Explanations To Clinical Examination / P T THOMAS.

-Second Edition.

Bibliography: page 45

ISBN 978-967-2008-37-8

1. Physical diagnosis. 2. Nursing Diagnosis. I. Title.

616.0754

CONTENTS

- FOREWORD TO FIRST EDITION**xiii
- PREFACE TO FIRST EDITION**xv
- PREFACE TO SECOND EDITION**xvii
- ACKNOWLEDGEMENTS**xix
- INTRODUCTION**xxi
- ABBREVIATIONS**xxiii

- HISTORY TAKING / CASE WRITE-UP** 1
 - 1. Chief complaint 1
 - 2. History of present illness..... 1
 - 3. Review of systems 2
 - 4. Past history 3
 - 5. Drug history 3
 - 6. Writing a diagnosis 3
 - 7. Differential diagnosis..... 4
 - 8. Investigations..... 4
 - 9. Management 5

- GENERAL EXAMINATION** 5
 - 10. General inspection 5
 - 11. Nutritional status..... 5
 - 12. Hydration status 5
 - 13. Oral hygiene..... 6
 - 14. Eyes 6
 - 15. Facies 6
 - 16. Smells..... 6
 - 17. Abnormal sounds 6
 - 18. Higher mental functions 6
 - 19. The hands 6
 - 20. Lymph nodes 7

CARDIOVASCULAR SYSTEM	7
21. Positioning the patient.....	7
22. Jugular venous pulse	7
23. Common flaws in the examination of JVP.....	7
24. Forearm veins.....	8
25. Jugular venous pulse waves.....	8
26. Hepatojugular reflux	9
27. Differentiating JVP from carotid pulse.....	10
28. SVC obstruction	10
29. The pulse	10
30. Radio-radial delay.....	10
31. Volume and character of the pulse	11
32. The bisferiens pulse.....	11
33. The collapsing pulse.....	11
34. Irregular pulse	12
35. Pulsus paradoxus.....	12
36. Pulsus alternans	13
37. Radiofemoral delay	13
38. Slow rising pulse.....	13
39. Peripheral pulses.....	13
40. Blood pressure.....	14
41. Oedema	14
42. Cyanosis.....	15
43. Corneal arcus.....	15
44. Jaundice	15
45. Pallor	15
46. Thyroid	16
47. Parotid glands.....	16
48. Chest deformities	16
49. Barrel chest.....	17
50. Surgical scars	17
51. Gynaecomastia	17
52. The apex beat	17
53. Heart sounds	18
54. Intensity of P2 and A2.....	19
55. Split first heart sound.....	19
56. Split S2	19
57. Fixed splitting of P2	19
58. Reversed splitting of S2.....	19

RESPIRATORY SYSTEM	20
59. Respiratory distress	20
60. Position and exposure.....	20
61. Inspection	20
62. Location of chest signs	20
63. Tracheal deviation	21
64. Causes of tracheal deviation.....	21
65. Tracheal tug	22
66. Cricosternal distance.....	22
67. Accessory muscles of respiration.....	22
68. Chest expansion	23
69. In-drawing (recession).....	23
70. Position of the apex beat	23
71. Air entry.....	23
72. Post-tussive crepitation.....	23
73. Lung / lobe collapse	23
74. Vocal fremitus and vocal resonance.....	24
75. Breath sounds.....	24
76. Whispering pectoriloquy.....	24
77. Adventitious sounds.....	24
ABDOMEN	25
78. Inspection	25
79. Palpation.....	25
80. Ballotment of kidneys.....	25
81. The liver span	26
82. Percussion.....	26
NERVOUS SYSTEM	27
83. The approach.....	27
84. Pupillary light reflexes.....	27
85. Consensual light reflex.....	27
86. Pupil-sparing CN III lesion	27
87. Marcus-Gunn Phenomenon.....	28
88. Horner’s syndrome.....	28
89. Locating the lesion in visual loss.....	28
90. Ptosis of the upper eyelids.....	29
91. CN IV examination.....	29
92. Rinne’s and Weber’s tests.....	29

93. Amaurosis fugax	30
94. Dysphasia and dysarthria	30
95. Fluent and non-fluent aphasia	30
96. Muscle tone	30
97. Eliciting tendon reflexes	30
98. Jaw jerk	31
99. Babinski's sign	31
100. Abdominal reflex	31
101. Understanding corticobulbar tracts.....	31
102. Diagnosing a lesion in neurology.....	31
103. Locating the lesion in hemiplegia	32
104. ACA lesion.....	32
105. MCA lesion.....	32
106. Lacunar infarcts	32
107. Bamford / Oxford classification of stroke	33
108. Crossed paralysis	33
109. Anterior choroidal artery	33
110. Posterior cerebral artery	33
111. Why the upper part of face is spared in a case of hemiplegia	33
112. Tongue deviation and dysphagia in hemisphere lesions	34
113. CN XI involvement in a case of stroke	34
114. When to suspect brainstem lesions	34
115. Pseudobulbar palsy	35
116. Locked-in syndrome, persistent vegetative state and brain death	35
117. Crebellar dysfunction	35
118. Mortality in strokes	36
119. Cortical sensations	36
120. Dissociated sensory loss	36
121. Romberg's sign	36
122. Cardinal features in neurology.....	36
123. Eliciting signs in Parkinson's disease.....	37
124. Differentiating seizure from syncope	37
125. Flapping tremor (asterixis).....	38
BLOOD DISORDERS	38
126. Anaemia.....	38
127. Preliminary diagnosis of anaemia.....	38

128. Repeated blood transfusions	39
129. Spleen	39
130. Skin bruises	39
131. Bleeding disorders.....	39
132. Interpreting PT, PTT and BT.....	40
133. Why is heparin given along with warfarin.....	40
134. Hypercoagulable state	40
135. Lymphadenopathy.....	40
136. Hypersplenism.....	40
137. Splenectomy.....	40
138. Hyperviscosity syndrome	40
ENDOCRINE SYSTEM.....	41
139. Differentiating obesity from Cushing’s syndrome.....	41
140. Cushing’s syndrome	41
141. Addison’s disease and addisonian crisis	41
142. Graves’ disease.....	41
143. Investigating endocrine conditions.....	42
144. Metabolic syndrome	42
RHEUMATOLOGICAL DISORDERS	42
145. In general	42
146. Polyarthrits	42
147. Gout and pseudogout	43
148. Carpal tunnel syndrome.....	43
149. Raynaud’s phenomenon	43
150. Sjogren’s syndrome	43
151. Prolonged fever / pyrexia of unknown origin	44
BIBLIOGRAPHY	45

FOREWORD TO FIRST EDITION

Learning medicine, like other sciences, has always been built on the three pillars of acquiring knowledge, psychomotor skills and a professional attitude. A combination of these three domains provides the student with essential competency and appropriate attitude to become a great doctor.

Accurate elicitation of clinical signs is vital to diagnose and treat patients. Acquiring knowledge and skills towards this end is important to be a great doctor, despite the technological advances in laboratory investigations and imaging which are expensive, invasive and sometimes harmful.

There are many books on clinical examination but this little and concise book gives us essential explanations to clinical examination, which are mostly not found in other books.

Professor Dr. PT Thomas with his 13 years of experience as an undergraduate medical teacher has expounded on 100 most useful and commonly least understood topics. I am sure this handbook will become an important reference material for all aspiring medical and nursing students as well as young lecturers in the field.

Prof Dr. Ahmad Hata Rasit

Dean Faculty of Medicine and Health Sciences
Universiti Malaysia Sarawak, Kota Samarahan.

Essential Explanations to Clinical Examination

Second Edition

Can you explain the various types of splitting of the heart sounds; the tapping apex beat; the pulsus paradoxus? What is the best way to differentiate a jugular venous pulse from a carotid pulse?

Do you know why the vocal fremitus is increased in a lung consolidation; the chest expands less or more in emphysema; the significance of whispering pectoriloquy?

Why liver span measurement is not so sensitive; are the kidneys ballotable?

What is dissociated sensory loss; how to easily look for consensual light reflex of the pupil; why is macula spared in the homonymous hemianopia of a posterior circulation stroke?

If you can answer all these, probably you don't need to buy this book. If not, you surely do need it. This book is simple, easy to digest and devoid of unnecessary medical jargon. So, just go for it!



P. T. Thomas was born in Kerala, India on 3 July 1949. He is married to Dr. Kiran Thomas for 41 years and has four children and three grandchildren. He obtained his MBBS with three gold medals from Jiwaji University, Gwalior in January 1971, and MD (Internal Medicine) from the same university in 1975. In addition, he holds a Post-graduate Diploma in Teaching and Learning awarded by UNIMAS in 2009. He worked as physician in Kerala from 1975 to 1994. He arrived in Sarawak in 1995 and worked as a medical specialist with the Ministry of Health for three years before joining the Faculty of Medicine and Health Sciences at Universiti Malaysia Sarawak in 1998. He climbed the ladder as a lecturer in medicine and 10 years later, he was appointed professor. His wide experience of teaching 13 batches of medical students prompted him to write this book in 2013. Prior to that he had co-authored *Aids to Clinical Examination* in 2004, also published by Unimas Publisher and still selling well.. This second edition is fully updated and offers additional content motivated by the encouraging response to the first edition.



ISBN 978-967-2008-37-8

