

# THE HEALTHY VEINS BOOK

## Understanding Varicose Veins and Leg Swelling

<b>About the Editor .....</b>	iii
<b>Dedication .....</b>	iv
<b>Contents .....</b>	v
<b>Contributors.....</b>	ix
<b>Foreword .....</b>	xiii
<i>Peter Gloviczki, MD</i>	
<b>Preface .....</b>	xv
<i>John Blebea, MD, MBA</i>	

## INTRODUCTION

<b>1. Arteries and Veins — The Circulatory System .....</b>	1
<i>Mark Garcia, MD</i>	

<b>2. How Leg Veins Function .....</b>	9
<i>Fedor Lurie, MD, PhD</i>	

## VARICOSE VEINS

<b>3. Spider Veins .....</b>	13
<i>Frank G. Fort, MD</i>	

<b>4. Varicose Veins.....</b>	17
<i>Harold Welch, MD</i>	

<b>5. Who Gets Varicose Veins? .....</b>	21
<i>Monika Gloviczki, MD, PhD and Peter Gloviczki, MD</i>	

<b>6. Symptoms of Varicose Veins and Bad Vein Valves .....</b>	25
<i>Gregory G. Westin, MD and Michael C. Dalsing, MD</i>	

<b>7. Complications of Varicose Veins .....</b>	31
<i>Misaki M. Kiguchi, MD, MBA and Ellen D. Dillavou, MD</i>	

<b>8. Evaluation of Varicose Veins .....</b>	37
<i>Rafael D. Malgor, MD and Nicos Labropoulos, PhD</i>	

## TREATMENT OF VARICOSE VEINS

<b>9. Healthy Habits .....</b>	45
<i>Beverley Chan, MD</i>	
<b>10. Medicines for Veins .....</b>	49
<i>Beverley Chan, MD</i>	
<b>11. Compression Stockings and Wrappings .....</b>	53
<i>Joseph A. Caprini, MD</i>	
<b>12. Sclerotherapy .....</b>	61
<i>Jennifer J. Watson, MD</i>	
<b>13. Phlebectomy .....</b>	67
<i>Mark Lafrati, MD</i>	
<b>14. Surgical Treatments for Venous Disease .....</b>	73
<i>Mark Lafrati, MD</i>	
<b>15. Radiofrequency Ablation .....</b>	79
<i>Kirthi S. Bellamkonda, MD, MS and Cassius I O Chaar, MD, MS</i>	
<b>16. Laser Ablation .....</b>	83
<i>Edouard Aboian, MD and Cassius I O Chaar, MD, MS</i>	
<b>17. Mechano-chemical Ablation of Veins .....</b>	85
<i>Steve Elias, MD and John Blebea, MD, MBA</i>	
<b>18. Sealing the Veins with Glue .....</b>	89
<i>Allesandra Puggioni, MD and Steve Elias, MD</i>	

## OTHER VEIN CONDITIONS

<b>19. Phlebitis in the Arm .....</b>	93
<i>Juan M Coalzo, BS and Jose A Diaz, MD</i>	
<b>20. Varicose Veins During Pregnancy .....</b>	97
<i>Kathleen Ozsvath, MD</i>	

## DEEP VEIN DISEASE – BLOOD CLOTS

<b>21. What are they and Why Do they Happen? .....</b>	101
<i>Ashley Gutwein, MD and Raghu L. Motaganahalli, MD</i>	
<b>22. Blood Clotting Disorders.....</b>	107
<i>Nasim Hedayati, MD and Teresa L. Carman, MD</i>	
<b>23. Symptoms and Signs of DVT .....</b>	113
<i>Harry Ma, MD, PhD</i>	
<b>24. Diagnosing a DVT.....</b>	117
<i>Christopher Tanga, DO and Linda Harris, MD</i>	
<b>25. Blood Clots to the Lungs: Pulmonary Embolism .....</b>	123
<i>Emily A. Malgor, MD and Rafael D. Malgor, MD</i>	
<b>26. Legs After a DVT: The Post Thrombotic Syndrome .....</b>	129
<i>Ellen D. Dillavou, MD and Emily A. Malgor, MD</i>	

## TREATMENT AND PREVENTION OF DEEP VEIN DISEASE

<b>27. Goals of Treatment for DVT: The Legs .....</b>	133
<i>Amber E. Ritenour, MD and Ruth L. Bush, MD, JD</i>	
<b>28. Anticoagulant Treatment of DVT: For the Legs and Body.....</b>	137
<i>Amy E Felsted, MD and Thomas W. Wakefield, MD</i>	
<b>29. Interventions for Clot Removal .....</b>	143
<i>Ronak Patel, DO and Anil Hingorani, MD</i>	
<b>30. Inferior Vena Cava Filters: Preventing Clots to the Lungs .....</b>	149
<i>Neekita Jikaria, BS and Faisal Aziz, MD</i>	
<b>31. Prevention of Blood Clots.....</b>	155
<i>Sandra D. Dickerson, MD</i>	
<b>32. Personal Risk Assessment for Blood Clots .....</b>	161
<i>Joseph A. Caprini, MD</i>	
<b>33. Living with Venous Insufficiency .....</b>	165
<i>Alessandra Puggioni,MD and Taimur Saleem, MD</i>	

## SPECIAL VEIN CONDITIONS

<b>34. Deep Vein Blockage in the Pelvis: May-Thurner Syndrome .....</b>	175
<i>Windsor Ting, MD and Munier Nazzal, MD, MBA</i>	
<b>35. Pelvic Varicose Veins .....</b>	181
<i>Antonios P. Gasparis, MD</i>	
<b>36. Other Causes of Pelvic Pain .....</b>	187
<i>Ronald S. Winokur, MD and Neil M. Khilnani, MD</i>	
<b>37. Lymphedema of the Legs .....</b>	191
<i>Daniel F. Geersen, PA-C, MPAP and Cynthia K. Shortell, MD</i>	
<b>38. Other Causes of Leg Swelling .....</b>	199
<i>Harold Welch, MD</i>	
<b>39. Blood Clots in the Arms .....</b>	205
<i>Karl A. Illig, MD</i>	

## OTHER QUESTIONS TO ASK

<b>40. Questions for You and Your Doctor .....</b>	211
<i>Elna M Masuda, MD and Mark H. Meissner, MD</i>	
<b>For Further Reading .....</b>	215
<i>John Blebea, MD, MBA</i>	
<b>Glossary .....</b>	223
<i>John Blebea, MD, MBA</i>	
<b>Index .....</b>	243