

TABLE OF CONTENTS

DAFLON 500 MG AND THE LYMPHATIC PUMP: THERAPEUTIC VALUE IN CHRONIC VENOUS INSUFFICIENCY

Pathophysiology of Lymphoedema <i>PS Mortimer</i>	3
Pharmacological Activity of Daflon 500 mg on Experimental Lymphoedema <i>JR Casley-Smith, Judith R Casley-Smith</i>	7
Microlymphography: Assessment of Daflon 500 mg Activity in Patients with Chronic Venous Insufficiency <i>C Allegra, M Bartolo, B Carioti, D Cassiani, MG Besse Boffi</i>	12
Magnetic Resonance Imaging A New Method to Assess Edema in Patients with Chronic Venous Insufficiency <i>E Insua, J Viana, A Galindo, JA Jiménez Cossío</i>	17
Retrospective Study of 500 Patients with Lymphoedema <i>JL Ciucci</i>	21
Effect of Daflon 500 mg on Lymphedema Secondary to Breast Cancer Treatment <i>AP Pecking, JL Floiras, P Rambert, A Boudinet, S Lasry, JR Garbay, G Pillion, J Rouëssé</i> ..	25
Benefits and Limitations of Different Therapies for Lymphoedema <i>Judith R Casley-Smith, JR Casley-Smith</i>	29

EMBRYOLOGY, ANATOMY AND LYMPHOGENESIS

Control of Lymphangiogenesis <i>MH Witte, CL Witte, D Way, M Bernas</i>	37
The Migration of Lymphocytes in the Interfollicular Lymphatic Vessels of the Intestinal Peyer's Patches <i>G Azzali, ML Arcari</i>	41
The Organization of Lymphatic and Blood Vessels in the Peyer's Patches of the Small Intestine and Colon <i>G Azzali, ML Arcari</i>	45
Morphofunctional Effects of Thoracic Duct Ligature in the Dog <i>P Boaventura, A Ribeiro, P Rodrigues, N Grande</i>	49
Pericoronal Lymphatics in Dog Hearts <i>O Eliska, M Eliskova, AJ Miller</i>	53
Blood Vessels and Lymphatics in the Venous Ulcer <i>M Eliskova, O Eliska</i>	57
Morphological Characteristics of the Intramural Lymphatics in the Collapsed and Distended Urinary Bladder of the Monkey <i>RC Ji, S Kato, M Miura, H Shimoda, T Kudo, T Usui</i>	61
Histochemical Demonstration of the Intramural Lymphatic Networks in the Digestive Tract <i>H Shimoda, S Kato, T Kudo</i>	65
Histochemical Characteristics of the Endothelial Cells of the Subcapsular Sinus in the Monkey Mesenteric Lymph Node <i>S Kato, RC Ji, M Miura</i>	69
Backscattered Electron Imagings of the Enzyme-Histochemical Activity of the Lymphatics and Nervous Systems in the Small Intestine <i>S Kato, H Shimoda, RC Ji</i>	72
The Fine Distribution of the Lymphatic Networks in the Human Gallbladder <i>T Kudo, S Kato, H Shimoda, RC Ji, Y Uchida</i>	75
Morphological Peculiarities of the Lymphatic Capillaries in the Masticatory and Lining Mucosa <i>C Marchetti, P Poggi, A Icaro Cornaglia, S Rizzo, R Rodriguez y Baena</i>	79
Visualization of the Lymphatic Vascular System in the Human Dental Pulp <i>Y Matsumoto, S Kato, G Tachibana, M Miura, S Yanagisawa</i>	83
Structural Organization of the Initial Lymphatics in the Monkey Spinal Meninges as Revealed by an Enzyme-Histochemical Method <i>M Miura, S Kato, RC Ji</i>	86
Lymphatic Vessels in Normal Human Thymus <i>P Poggi, C Marchetti, R Scelsi</i>	91

Lymphatic Structures Fibrosclerosis Determined by Lymphostasis and its Effects on Connective Tissues	
<i>FC Rada, N Tudose, H Cristian, V Sântimbreanu, V Berceanu, IO Rada</i>	95
Difference in Migration Pattern Between T Lymphocytes Originated from Intestinal Lymphatics and Peyer's Patches	
<i>H Serizawa, S Miura, Y Tsuzuki, T Shigematsu, R Hokari, H Fujimori, Y Hamada, M Tsuchiya, H Ishii</i>	99
Quality Control in a Tissue Culture Laboratory in Lymphology: Issues and Guidelines	
<i>D Way, MH Witte, CL Witte, M Bernas, L Fuchs</i>	103

LYMPHATIC PHYSIOPATHOLOGY

Clearance of Intramuscular Albumin from Exercising Human Skeletal Muscle	
<i>E Havas, V Vihko</i>	109
Interleukin-1 in Peripheral Blood of the Lymphedema Patients with Acute Cellulitis	
<i>M Ohkuma, E Okada</i>	113
Immunohistochemical Examination of Superficial Lymphangioma, Lymphangiectasia, Portwine Nevus and Angiokeratoma	
<i>M Ohkuma, T Uesugi, S Hashimoto</i>	115
Leukocytosis and Elevated CRP in Acute Cellulitis in Lymphedema	
<i>M Ohkuma</i>	119
Lymphedema and HLA	
<i>M Ohkuma, Y Kanemitsu</i>	123
Lymph Cytokines in Obstructive Lymphedema—A Sign of Chronic Inflammatory Reaction	
<i>WL Olszewski, S Jamal, G Manokaran, H Galkowska, I Grzelak, M Zaleska</i>	126
Cytokines in Lymph Drained From Foot in Rheumatoid Arthritis	
<i>WL Olszewski, J Pazdur, I Grzelak, P Sliwinska-Stanczyk, E Kubasiewicz, E Kaminska-Tchorzewska, I Morawska, M Zaleska</i>	132
Inducible Nitric Oxide Synthase Participates in the Pathogenesis of Acute Localized Cellulitis Complicating on Skin Lymphedema	
<i>E Okada, M Ohkuma</i>	139

MICROCIRCULATION AND LYMPH FLOW

Models of Lymph Flow Dynamics in Oedema	
<i>JR Casley-Smith</i>	145
Phenotypic Expressions of Bovine Lymphatic Endothelial Cell in Cultures as Studied by Immunohistochemistry	
<i>C Marchetti, A Casasco, A Di Nucci, M Casasco, M Reguzzoni, S Rosso</i>	148
Effects of Mechanical Massage on Uptake of Tumor Cells From Interstitial Space into Initial Lymphatics	
<i>F Ikomi, H Nojiri, T Ohhashi</i>	152
Study of the Skin Laser Doppler Flux in Limb with Lymphoedema Compared to the Safe Clinical Side	
<i>M Moulinie, M Evrard, M Gracia, V Bailleaux, C Janbon</i>	156
The Antagonistic Effect of Lymph on Shock in Rat	
<i>CY Niu, J Zhang, T Yao, G Fan</i>	159
Vascular Endothelial Growth Factor (VEGF) in the Human Cutaneous Initial Lymphatics	
<i>M Ohkuma, T Futasugi, S Hashimoto</i>	163
Immunohistochemical Examination of the Collecting Lymphatic and the Vein	
<i>M Ohkuma</i>	166
A Novel Monoclonal Antibody Specific for Lymph Dendritic Cells	
<i>H Galkowska, WL Olszewski, B Interewicz, A Porebska, U Wojewodzka</i>	169
Tissue Fluid and Lymph Proteins in Obstructive Lymphedema—Low, Normal or High?	
<i>WL Olszewski, S Jamal, G Manokaran, V Kumaraswami, FN Tripathi, A Engeset</i>	174
Influence of Mechanical Trauma on Lymphatic Outflow from the Limb	
<i>G Szczesny, A Veihelmann, D Nolte, R Leiderer, E Schutze, WL Olszewski, K Messmer</i>	181
Tissue Fluid and Lymph Pressure Flow in Patients with Obstructive Lymphedema	
<i>WL Olszewski, S Jamal, FM Tripathi, G Manokaran</i>	186

LYMPHODRUGS

Benzo-Pyrones in High-Protein Oedemas	
<i>JR Casley-Smith, Judith R Casley-Smith</i>	197

Pharmacology of Chinese Drugs; Clinical Effect of Wu-Ling-San for Edema and of Wu-Ling-San & Xiao-Chai-Hu-Tang for Lymphedema M Ohkuma	202
Combined Therapy for Lymphedema by Microwave, Oral Chinese Drugs, Manual Lymph Drainage and Less Elastic Bandage M Ohkuma	206
Preliminary Results of Unguentum Lymphaticum in Six Patients SRJ Thiadens	210
PATOPHYSIOLOGY OF EDEMA	
Intermittent Sequential Pneumatic Compression (ISPC)...from the Device to the Patient O Leduc, J-P Belgrado, R Moens, A Leduc	217
Variation in Volume of a Normal Arm During and Following Compression Therapy M Bernas, P Summers, D Belch, MH Witte, CL Witte	221
Hyaluronan and Protein Content in Tissue Fluid of Lymphedematous and Venous Edema Limb N-F Liu	225
Chromosome Examination in Primary and Secondary Lymphedema M Ohkuma	229
Bradykinin, PGE 2, and Interleukin-6 (IL-6) Involved in Pathogenesis of Acute Cellulitis in Lymphedema M Ohkuma, E Okada	231
EPIDEMIOLOGY CLASSIFICATION AND PROTOCOL OF THE LYMPHEDEMA	
A Contribution to the Lymphedema Classification J Bruna, AJ Miller	239
Lymphedema Epidemiology in Italy C Campisi, S Michelini, F Boccardo, A Zilli	243
Classification and Surgical Treatment of Lymphedema A Cariati, F Cetta, R Costa, E Cariati	245
Upper Limb Lymphoedema Rate After Breast Cancer Treatment. Risk Factors. Report of 683 Observations J-Cl Fernandez, D Serin	250
INVASIVE AND NON-INVASIVE DIAGNOSIS IN LYMPHOLOGY	
Distal and Proximal Lymphoscintigraphy as a Tool for the Clinician in Localized Lymphatic Insufficiency AP Pecking, RV Cluzan	257
Lean Mass and Fat Mass in Lower Limb Lymphedema (LO) Analysed by Biphotonic Absorptiometry Before and After Treatment F Alliot, RV Cluzan, S Ghabboun, M Pascot	261
Conservative Treatment of Limb Lymphedema in Outpatients Results According to Clinical Features MFC Andrade, MAC Andrade, P Puech-Leão	265
Reflexions Concerning Stemmer's Sign in Primary Lymphedema A Pissas, MK Khatib, S Laporte, E Dautheville	268
Spontaneous Chylothorax and Malignant Disease Report of a Case MFC Andrade, DH Syllos, TM Martins, JF Aguiar, P Puech-Leão	273
Benefits of MRI Lymphangioma Diagnostics K Benda, M Mechl, B Prokeš	277
Laser-Doppler Evaluation in Peripheral Lymphedema F Boccardo, M Tacchella, A Zilli, C Campisi	279
Magnetic Resonance and Computer Tomography of Splenic Expansions J Bruna	282
Radiological Imaging of Lymphedema J Bruna	286
Head Involvement in Lymphomas J Brunova, J Bruna	289
Pre- and Postoperative Lymphangioscintigraphy in the Evaluation of Lymphedema in Patients with Chronic Venous Insufficiency A Cariati, V Pollinzi, A Costanzo, S Biggi, E Cariati	292

Biphotonic Absorptiometry of the Secondary Upper Limb Lymphedema RV Cluzan, A Pecking, JC Ruiz, F Alliot, S Ghabboun, M Pascot, V Gachon Lameyre	296
Elephantiasis of the Lower Limb Secondary to the Use of Prosthetic Orthopaedic Device for Poliomylitis M Dominguez, R Yoldi, JC Cruz	299
Lymphoscintigraphic Assessment of Manual Lymphatic Drainage. Guidelines for its Application J-Cl Fernandez	302
Congenital Ring Band Lymphedema of the Lower Limb: Case Report E Insua, D Vogelfang, JMM Reis	305
MRI Features of Lymphedema of Lower Extremity N-F Liu, C-G Wang	308
Ormond's Disease and Lymphedema F Lozano, A Almazán, FJ Garcia, F Parreño, A Gómez	312
The Current Role of Lymphoscintigraphy in the Diagnostic Evaluation of Patients with Peripheral Lymphedema G Mariani, C Campisi, G Taddei, F Boccardo, F Martini, A Rahimi Mansour, A Zilli	316
CT Utility for Staging Lower Limb Lymphoedemas (A 150 Case Prospective Study) M Marotel, R Cluzan, M Pascot, S Ghabboun, F Alliot, JL Lasry	320
Digital Data Management in Radiology: Applications in Lymphology GC McNeill, WH Williams, MH Witte, CL Witte	324
MR Lymphography After Interstitial Injection of Contrast Media B Misselwitz, J Platzek, H-J Weinmann	326
Predictive CT Criteria of Response to Lymphatic Drainage in Lymphedema of the Lower Limbs E Monnin-Delhom, MY Evrard, JM Bruel, C Janbon	330
CT Assessment of the Efficacy of Lymphatic Drainage E Monnin-Delhom, MY Evrard, JM Bruel, C Janbon	335
Role of Sestamibi Scintiscanning in Suspected Recurrent Disease and Lymphoedema in Breast Cancer Patients SP Parbhoo, J Buscombe, D Thakrar, G Nababout, SM Kelleher, A Hilson, J Hinton, A Deery, J Crow	340
Lymphoscintigraphy: Overview of its Use in the Lymphatic System AP Pecking, FJ Gougeon-Bertrand, JL Floiras, JR Garbay, P Banzet, J Rouëssé	343
CT Images Lymphatic Versus Venous Edema and Other Edemas FC Rada, N Nica, M Indrei, DO Ciobanas, V Sântimbreanu, IO Rada	347
Scintigraphic Evaluation of Lymphatic Diseases R Ramkumar, G Manokaran, V Kumarasami, R Chandran	351
Evolution of Lymphangioscintigraphic Findings and Value of Combined Physiotherapy in Peripheral Edema from AIDS-Associated Kaposi Sarcoma A Stazzone, MH Witte, CL Witte, M Fiala, W Williams, G McNeill, G Escobar, P Summers, M Bernas	353
Lymphangitis and Intractable Lymphedema after Topical Cantharidin AM Stazzone, P Borgs, CL Witte, MH Witte	357
Radioisotropic Lymphography, Dynamic and Static Findings in the Study of Lymphedemas of the Limbs D Vogelfang, J Wagner, AF Thom	361
Evaluation and Significance of Lymphangioscintigraphic Transport Index in Post-Mastectomy Lymphedema WH Williams, M Bernas, MH Witte, CL Witte, GC McNeill, JN Hall, J Schreiber	366

LYMPHATIC ANGIODYSPLASIA AND TREATMENT OF REFLUX SYNDROMES INCLUDING VISCELAR LYMPHANGIECTASIA-LYMPHANGIOMA

A Lymphedema-Angiodysplasia Computerized Database <i>M Bernas, T Myloyde, MH Witte, V Staugaard, CL Witte</i>	375
Angiodysplasias, Peripheral Lymphoedema, and Tumorigenous Syndromes <i>C Campisi, F Boccardo, G De Caro, VM Ieracitano, A Zilli</i>	378
Chyledema of a Limb and Chylothorax Treated Successfully with a Denver Shunt <i>G Tasnadi, R Mattassi, U Fox</i>	381
Hyperstomy Syndrome and Lymphedema: Lymphatic Dysfunction in Conjunction with Dysregulated Hyperdynamic Blood Flow <i>RC Mayall, ACDG Mayall, JC Mayall, J Freitas, MO Kurten, MF Almeida, RR Gonzales, WDP Souza</i>	385
The Big Angiodysplastic Syndromes in Pediatrics with the Participation of the Lymphatic System <i>CM Papendieck</i>	390
Angiodysplasias in the Newly Born <i>CM Papendieck</i>	393
Percutaneous Sclerosis or Excision of Lymphangioma/Lymphangiectasia Syndromes <i>CL Witte, MH Witte, E Unger, M Baker, P Granstrom, M Bernas, W Williams</i>	396

FILARIASIS

Failure in Lymphedema Treatment (Filarial)—The Patient Factor <i>S Jamal</i>	403
Genital Filariasis <i>G Manokaran, A Arasu, R Ramkumar</i>	407
Acute Dermatolymphangioadenitis in Course of “Filarial” Lymphedema—Bacteriological Studies of Blood, Tissue Fluid, Lymph and Lymph Nodes <i>WL Olszewski, S Jamal, G Manokaran, S Pani, V Kumaraswami, FM Tripathi, A Dworczynski, E Swoboda, F Meisel-Mikolajczyk, E Stelmach, M Zaleska</i>	410
Lymphoscintigraphy in Filariasis Using Indigenously Prepared Radiopharmaceutical <i>BG Ponnappa, TMR Panicker, P Korath, S Jamal, K Jagadeesan</i>	417

REHABILITATION OF LYMPHEDEMA

A Quality of Life Scale for Secondary Upper Limb Lymphedema <i>F Alliot, RJ Launois, RV Cluzan, M Pascot, S Ghabboun, I Ferme, V Gachon-Lameyre</i>	423
Body Image and the Rorschach Test in Secondary Upper Limb Lymphoedema <i>F Alliot, MA Georger, RV Cluzan, M Pascot, S Ghabboun</i>	427
Effectiveness of Inelastic Compression by Unna’s Boot in Reducing Advanced Primary Lower Limb Lymphedema <i>MFC Andrade, MAC Andrade, P Puech-Leão</i>	430
Patient’s Education as a Cornerstone of Good Results in a Lymphedema Treatment Center <i>MFC Andrade, MAC Andrade, AL Jácomo, PR Andrade, P Puech-Leão</i>	434
Medical Treatment of the Lymphedema in the Limbs <i>A Guzman, D Oneto</i>	437
Combined Physical Decongestion Therapy in Lymphostatic Edema: A Long-Range Study <i>R Kasseroller</i>	444
A Study Undertaken at Two Lymphoedema Clinics <i>JE Todd, J Welsh</i>	449
Complex Physical Therapy: Results in the Treatment of 130 Patients with Primary and Secondary Lymphedema of the Lower Limb <i>D Vogelfang, E Insua</i>	452

THERAPEUTIC POSSIBILITIES

Chronic Arm Oedema: Therapeutic Indication of Ultrasound Therapy <i>A Balzarini, G Diazzi, R Olivieri, F Ferla, F Gariboldi, F De Conno</i>	461
Prevention of Primary Lymphedema—Possible Way <i>K Benda, D Lebloch, M Bendová</i>	465
Preoperative Evaluation of the Lymphocytary Tolerance Versus Metal Endoprothesis <i>O Tapparo, F Conti, M Tapparo, A Cariati, E Cariati</i>	469

Updated Cost-Efficacies of Various Therapies for Lymphoedema JR Casley-Smith, Judith R Casley-Smith	471
Laser and Lymphatic O Eliska, M Eliskova	474
Simple Computerized System to Record and Assess the State and Evolution of Limb Lymphedema Under CDP Földi Method Treatment S Nieto	478
CDP Földi Method Treatment for Extremity Lymphedema: Short Term Results S Nieto	482
CDP Földi Method Treatment for Extremity Lymphedema: Long Term Results S Nieto	485
The Cost-Efficacies of Therapies for Breast Cancer MA González Viejo, MJ Condón Huerta, M Lecuona Navea	488
Liposomal Preparations for Local Lymph Node Treatment in Gynecological Malignancies JU Nefflen, J Ziegler, EI Heide, R Schubert, P Hirnle	492
Daily Care for the Lymphedema Patient M Ohkuma	501
The Less Elastic Bandage: Comparison of Two Commercial Products M Ohkuma	503
Prevention of Lymphedema: Some Paradoxical Situations (Hazard or Fatality?) A Pissas, S Laporte, MO Khatib, JB Dubois	506

PROBLEMS OF LYMPHEDEMA

Prevention of Secondary Lymphedema: Prospects for the Future C Campisi, JA Jiménez Cossío, A Pissas, A Leduc, S Michelini, F Boccardo, A Zilli	513
Some Unanswered Questions in Physical Therapy Judith R Casley-Smith, JR Casley-Smith	516
Venous Disorders in Secondary Upper Limb Lymphedema S Ghabboun, RV Cluzan, F Alliot, M Pasco	519
Cell Mediated Immunity is Altered in the Affected Limb in Postmastectomy Lymphedema EC Mallon, SM Powell, PS Mortimer, TJ Ryan	522
Phlebopathies in Conjunction with Lymphedemas RC Mayall, ACDG Mayall, WDP Souza, RR Gonzales, MF Almeida	526
Primary Prevention of Upper Limb Lymphedema in Breast Cancer: How, Why and What Kind of Results? AP Pecking, FJ Gougeon-Bertrand, JL Floiras, S Lasry, RV Cluzan, J Rouëssé	532
Iatrogenic Phlebolymphedema of the Upper Limb: Case Report E Insua, D Vogelfang, JMM Reis	536
Immunological Examinations in Lymphedema —The Second Report M Ohkuma, M Ikeda	539
Acute Localized Edema Caused by Skin Disease M Ohkuma	543
Skin Surface Bacteria in Uni- and Bilateral Lymphedema—The Second Report M Ohkuma, S Kubo, I Furuta	547

LYMPHATIC SURGERY

Long Term Results of Microlymphatic Grafting RGH Baumeister, A Frick, J Krumbach	551
Microlymphatic Reconstructive Surgery in Small Bowel Transplantation RGH Baumeister, S Sepulveda, A Kressel, Th Szymula von Richter	555
Direct Lymphography with Microsurgical Technique: Indications and Results F Boccardo, C Campisi, A Zilli, M Casaccia	559
Post Surgical Lymphedema: Iatrogenic or Preexisting Disease? A Dellachà, E Fulcheri, F Boccardo, C Campisi	562
Indications of Surgery in Patients with Lymphedemas: Toward a Multidisciplinary Unit of Decision P Trevidic, AP Pecking, S Ghabboun, F Alliot, M Pasco, RV Cluzan	566
Complete Reduction of Lymphoedema of the Arm by Liposuction after Breast Cancer—3 Year Results H Brorson, M Åberg, H Svensson	570
One Patient with Chronic Arm Lymphoedema Treated with Liposuction Not Needing Compression Garments—A Case Report	

<i>H Brorson, M Åberg, H Svensson</i>	576
Liposuction Versus Controlled Compression Therapy of Arm Lymphoedema <i>H Brorson, M Åberg, H Svensson</i>	580
Medical Protocol After Microsurgical Treatment <i>C Campisi, F Boccardo, M Tacchella, A Zilli</i>	582
Lymphatic Surgery: Current Role of Microsurgery <i>C Campisi</i>	585
Current Diagnostic Aspects and Surgical Treatment of Lymphedema [Video] <i>C Campisi, F Boccardo, M Tacchella, A Zilli</i>	589
Antigravitational Ligatures and Lymphonodal-Venous Shunts in the Treatment of Chylous Reflux Disease with Chylous Ascites: Description of the Technique [Video] <i>A Cariati, S Biggi, E Cariati</i>	592
Differences in the Surgical Treatment of Primary and Secondary Penile-Scrotal Lymphedema <i>A Cariati, F Cetta, S Biggi, R Costa, F Conti, E Cariati</i>	595
Lymphatic Venous Anastomosis in the Treatment of Lymphedema <i>A Guzman, J Deleveaux, L Rossi</i>	599
Limb Radionuclide Lymphoscintigraphy Prior and After a Lymphatic Bypass Using an Axillary Flap <i>P Trepidic, AP Pecking</i>	605

LYMPHOLOGY IN LATIN-AMERICA AND EUROPE

Lymphology in the Latin-Mediterranean Countries <i>C Campisi</i>	611
The Status of Lymphology in Spain and Portugal. <i>JA Jiménez Cossío</i>	613
Bonding in Lymphology (Latin America and Europe) <i>CM Papendieck</i>	614
In Memoriam of Professor Mario Degni <i>C Campisi</i>	616
Author Index	619