

Professor Waldemar L.Olszewski

Born in Piastów/Warsaw, Poland in a family of landowners in Central Poland with father a linguist and banking specialist. Received General Certificate of Education in 1948 in Warsaw. Started university studies first at Faculty of Law, Warsaw University in 1948 (through 1950) to change for Faculty of Medicine in 1949. Graduated in 1954, passed Board in Surgery exams in 1962. Received degree of PhD in 19962 and D.Science in 1968. Since 1970 associate professor at the Dept. of Surgery, Medical Academy, and Medical Research Center, Polish Academy of Sciences in Warsaw, since 1978 until now full professor at the same centers including since 1997 chairman of Clinical Department of Surgery, Ministry of Internal Affairs/Polish Academy of Science Hospital, Warsaw. Received postgraduate training and carried out research studies at Hammersmith Hospital, London during the period 1962-63, then at Harvard Medical School in Boston, USA, between 1968 and 1970. Worked at City Hospital#4, Warsaw, then Dept. of Surgery, Medical Academy, and Medical Research Center, Warsaw as head of Dept. of Surgical Research & Transplantation and since 1997 as Chief of Clinical Department of Surgery, Ministry of Internal Affairs/Polish Academy of Sciences Hospital, Warsaw. Other professional positions include Visiting Professor at Radiumhospitalet, Oslo,(since 1976-), St.Bartholomew's Medical School, London (since 1994-), Research Officer World Health Organization, Madras-Pondicherry-Benares, India (since 1992-). Served as President of European Society for Surgical Research in 1977-78, President of International Society of Lymphology in 1989-91, President of Polish Society for Immunology in 1995-98. Served also as member of editorial boards of many international medical journals among them Lymphology (USA), International Angiology (GB), Central European Journal of Immunology (Poland), Phlebolinfologia (Spain), Cell Transplantation (USA), Lymphatic Research and Biology (USA), US-Chinese Journal of Lymphology and Oncology (China), Indian Medical Research J (India). Doctor Honoris Causa Universita di Genova, Italy (2005). Awards of the Interantional Society of Lymphology (USA) (1975), National Lymphedema Network USA (2006), Lymphatic Research Foundation NIH (USA) 2006, American Society of Lymphology USA (2007), Polish Academy of Sciences (2006).

Clinical and research interests comprise vascular surgery, transplantation, physiology and surgery of the lymphatic system, and immunology. Published around 600 publications, 7 scientific books among them Peripheral Lymph - formation and

immune function (CRC Press, USA, 1985), In Vivo Immune Cell Migration (CRC Press, USA, 1987), Handbook of Microsurgery (CRC Press, USA 1987) and Lymph Stasis - pathophysiology, diagnosis and treatment ( CRC Press, USA, 1991).

Main scientific contributions include designing and introducing into clinical practice the surgical lympho-venous shunts (1966), discovery of spontaneous rhythmic lymphatic contractility in humans (1980), proving that bacterial factor is responsible for development of human limb lymphedema (1994), introducing low-dose, long-term penicillin administration for prevention of chronic dermatitis and lymphangitis in Asian countries (1996), detecting the phenomenon of non-specific elimination of cell grafts (1990), preservation of tissues for transplantation in dehydrating sodium chloride (2003).

At present is at the Medical Research Center, Polish Academy of Sciences (Head of Dept) and Ministry of Internal Affairs Clinical Hospital (Chief Consultant), Warsaw, Poland.

#### Main publications on lymphatic system:

1. Olszewski W.L. Surgical lymphovenous shunts in treatment of lymph stasis (in Polish). Proc Congress Polish Surgical Society, 1966, 69-70.
2. Nielubowicz J., Olszewski W.L. Surgical lymphovenous shunts in patients with secondary lymphedema. Brit J Surg, 1968, 55, 440-442.
3. Olszewski W.L., Engeset A. Intrinsic contractility of prenodal lymph vessels and lymph flow in man. Am J Physiol, 1980, 239, H775-783.
4. Olszewski W.L. Prevention of lymphangitis in lymphedema: a proposed study. Lymphology, 1994, 27, 201-205.
5. Olszewski W.L., Koe K.R., Engeset A. Immune proteins and other biochemical constituents of peripheral lymph in patients with malignancy and postirradiation lymphedema. Lymphology, 1978, 11, 174-180.
6. Olszewski W.L., Engeset A. Immune proteins, enzymes and electrolytes in human peripheral lymph. Lymphology, 1978, 11, 156-164.
7. Olszewski W.L., Engeset A., Lukasiewicz H. Immunoglobulins, complement and lysozyme in leg lymph of normal men. Scand J Clin Lab Invest, 1977, 37(8), 669-674.
8. Olszewski W.L., Grzelak I., Engeset A. Cells in lymph draining normal human skin-monoclonal antibody analysis. Lymphology, 1982, 15(4), 168-173.
9. Olszewski W.L., Grzelak I., Ziolkowska A., Engeset A. Effect of local hyperthermia on lymph immune cells and lymphokines of normal human skin. J Surg Oncol, 1989, 41(2), 109-16.
10. Olszewski W.L., Grzelak I., Ziolkowska A., Engeset A. Immune cell traffic from

blood through the normal human skin to lymphatics. *Clin Dermatol*, 1995, 13(5), 473-83.

11. Olszewski W.L., Engeset A. Intrinsic contractility of prenodal lymph vessels and lymph flow in human leg. *Am J Physiol*, 1980, 239(6), H775-783.
12. Olszewski W.L., Jamal S., Manokaran G., Lukomska B., Kubicka U. Skin changes in filarial and non-filarial lymphoedema of the lower extremities. *Trop Med Parasitol*, 1993, 44(1), 40-4.
13. Olszewski W.L., Kubicka U. Immunohistochemical studies of skin in secondary lymphedema of limbs reveal presence of chronic inflammatory reaction. *Lymphology*, 1996, 29 (Supl.), 327-330.
14. Olszewski W.L., Jamal S., Lukomska B., Manokaran G., Grzelak I. Immune proteins in peripheral tissue fluid-lymph in patients with filarial lymphedema of the lower limbs. *Lymphology*, 1992, 25(4), 166-71.
15. Olszewski W.L., Jamal S., Manokaran G., Gałkowska H., Grzelak I., Zaleska M. Lymph cytokines in obstructive lymphedema - a sign of chronic inflammatory reaction. *Lymphology*, 1998, 31, 126-131.
16. Olszewski W.L., Grzelak I., Engeset A. Lymph cells in normal and lymphedematous leg lymph. *Lymphology*, 1994, 27 Supl., 224-226.
17. Olszewski W.L., Bryła P. Lymph and tissue pressures in patients with lymphedema during massage and walking with elastic support. *Lymphology*, 1994, 27 Supl., 512-516.
18. Olszewski W.L. The treatment of lymphedema of the extremities with microsurgical lympho-venous anastomoses. *Int Angiol*, 1988, 7(4), 312-21.
19. W.L. Olszewski. Episodic dermatolymphangioadenitis (DLA) in patients with lymphedema of the lower extremities before and after administration of benzathine penicillin: a preliminary study. *Lymphology*, 1996, 29, 126-131.
20. Olszewski W.L. Prevention of lymphangitis in lymphedema: a proposed study. *Lymphology*, 1994, 27, 201-205.
21. Olszewski W.L., Jamal S. Skin bacterial factor in progression of filarial lymphedema. *Lymphology*, 1994, 27, 148-149.
22. Olszewski W.L., Jamal S., Manokaran G., Pani S., Kumaraswami V., Kubicka U., Łukomska B., Dworczyński A., Swoboda E., Meisel-Mikołajczyk E. Bacteriologic studies of skin, tissue fluid, lymph, and lymph nodes in patients with filarial lymphedema. *Am J Trop Med Hyg*, 1997, 57, 7-15.
23. Olszewski W.L., Jamal S., Manokaran G., Pani S., Kumaraswami V., Tripathi F.M., Dworczyński A., Swoboda E., Meisel-Mikołajczyk F., Stelmach W., Zaleska M. Acute dermatolymphangioadenitis in course of "filarial" lymphedema - bacteriological studies of blood, tissue fluid, lymph and lymph nodes. *Lymphology*, 1998, 31, 410-416.
24. Olszewski W.L., Jamal S., Manokaran G., Pani S., Kumaraswami V., Kubicka U., Łukomska B., Tripathi F.M., Dworczyński A., Swoboda E., Meisel-Mikołajczyk F., Stelmach E., Zaleska M. Bacteriological studies of blood, tissue fluid, lymph and lymph nodes in patients with acute dermatolymphangioadenitis (DLA) in course of "filarial" lymphedema. *Acta*

- Tropica, 1999, 73, 217-224.
25. Olszewski WL. Clinical efficacy of micronized purified flavonoid fraction (MPFF) in edema. *Angiology*, 2000, 51(1): 25-9
  26. Miller GJ, Howarth DJ, Attfield JC, Cooper JA, Cooke CJ, Nanjee MN, Olszewski WL. Haemostatic factors in human peripheral afferent lymph. *Thromb Haemost*, 2000, 83 (3): 427-432
  27. M.N. Nanjee, C.J. Cooke, W.L. Olszewski, N.E. Miller. Concentrations of electrophoretic and size subclasses of apolipoprotein A-I-containing particles in human peripheral lymph. *Arterioscler Thromb Vasc Biol* 2000, 20: 2148-2155
  28. W.L. Olszewski. New methods of investigation in lymphedema. *Phlebology*, 2000, 29: 18-21
  29. B. Interewicz, H. Gałkowska, W.L. Olszewski, N.E. Miller. Apoptosis and free DNA in human peripheral lymph. *Lymphology*, 2000: 46-51
  30. W.L. Olszewski, F.N. Tripathi, G. Manokaran, S. Jamal, V. Kumaraswami, K. Purushothama, E. Stelmach, M. Zaleska, E. Swoboda. Mycotic flora of legs with filarial lymphedema. *Lymphology*, 2000: 141-143
  31. W.L. Olszewski, H. Gałkowska, A. Ziółkowska, M. Zaleska. Lymph from inflamed tissues provides information on local immune reaction to drugs. *Lymphology*, 2000: 25-29
  32. G. Szczęsny and W.L. Olszewski. Lymphatic and venous changes in lower limbs after mechanical trauma. *Lymphology*, 2000: 117-120
  33. M.N. Nanjee, C.J. Cooke, W.L. Olszewski, N.E. Miller. Lipid and apolipoprotein concentrations in prenodal leg lymph of fasted humans: associations with plasma concentrations in normal subjects , lipoprotein lipase deficiency, and lecithin: cholesterol acyltransferase deficiency. *J Lip Res* 2000, 41 (8): 1317-1327
  34. E. Swoboda-Kopeć, M. Łuczak, W.L. Olszewski, F.M. Tripathi. Sensitivity patters of fungi isolated from the skin of patients with filarial lymphoedema Editor Hakima Himmich, by Monduzzi Editore, International Proceedings Division. 2000: 219-224
  35. M.N. Nanjee, C.J. Cooke, J.S. Wong, R.L. Hamilton, W.L. Olszewski, N.E. Miller. Composition and ultrastructure of size subclasses of normal human peripheral lymph lipoproteins: quantification of cholesterol uptake by HDL in tissue fluids. *J Lipid Res* 2001, 42 (4): 639-648
  36. W.L. Olszewski, J. Pazdur, E. Kubasiewicz, M. Zaleska, Conrad J. Cooke, N. E. Miller. Lymph draining from foot joints in rheumatoid arthritis provides insight into local cytokine and chemokine production and their transport to lymph nodes. *Arthritis & Rheumatism* 2001, 44 (3), 541-549
  37. M.N. Nanjee, C.J. Cooke, R. Garvin, F. Semeria, G. Lewis, W.L. Olszewski, N.E. Miller. Intravenous infusion of apo A-i/lecitin discs increases pre-beta HDL concentration in tissue. *J Lip Res* 2001, 42: 1586-1593
  38. W.L. Olszewski. Atlas of Lymphology part. II. Servier, Paris 2001, 1-52
  39. W.L. Olszewski. Human afferent lymph contains apoptotic cells and “free” apoptotic DNA fragments – can DNA reutilized by the lymph node cells?

Lymphology 2001, 34:179-183

40. B. Interewicz, M. Maksymowicz, E. Szyper, E. Cybulski, W.L. Olszewski. Donor DNA from rejecting grafts is found in recipient tissues. Transpl Proc 2002, 34:699-700
41. W.L. Olszewski. Continuing discovery of the lymphatic system – what should we expect in the twenty – first century. Lymphology 2002, 35:99-104
42. W.L. Olszewski. Contractility patterns of normal and pathologically changed human lymphatics. Ann N Y Acad Sci 2002, 979:52-63
43. W. L. Olszewski. *De Novo* lymph node formation in chronic inflammation of the human leg. Ann N Y Acad Sci 2002, 979:166-77
44. W.L. Olszewski, H. Galkowska, D. Zolich. Immunohistopathology of skin in obstructive lymphedema- perivenular infiltrates but no perilymphatic infiltrates and lymphangiogenesis. Lymphology 2002, 35:88-89
45. W.L. Olszewski, J. Pazdur, E. Kubasiewicz, M. Zaleska, A. Ziolkowska, N.E. Miller. Activation of lymph cells in afferent lymph in local inflammation. Lymphology 2002, 35:99-102
46. W.L. Olszewski. Lymphoscintigraphy helps to differentiate edema of various etiologies (inflammatory, obstructive, posttraumatic, venous). Lymphology 2002, 35:233-235
47. W.L. Olszewski. Excision of fibrotic inguinal lymph nodes is indicated in lymphedema patients with no- lymph-flow in the groin. Lymphology 2002, 35:430-432
48. W.L. Olszewski. The lymphatic system in body homeostasis: Physiological conditions Lymph Res Biol 2003, 1(1):11-21
49. W.L. Olszewski. Physiopathological basis for diagnosis and treatment of lymph stasis Lymphology 2003, 35 (Suppl 2):126-165; Lymphology for Surgeons e.d. C.
50. W. L.Olszewski. Pathophysiological aspects of lymphedema of human limbs. I. lymph protein composition. Lymph Res Biol 2003, 1(3):235-243
51. T. Kujiraoka, M. N. Nanjee, T. Oka, M. Ito, M. Nagano, C. J. Cooke, S. Takahashi, W. L. Olszewski, J. Wong, I. P. Stepanova, R. L. Hamilton, T. Egashira, H. Hattori, N. E. Miller. Effects of intravenous apolipoprotein A-I/phosphatidylcholine discs on HDL-associated enzymes and lipid transfer proteins in humans. Arterioscler Thromb Vasc Biol 2003, 23: 1653-1659
52. C. J. Cooke, M. N. Nanjee, I. P. Stepanova, W. L. Olszewski, N. E. Miller. Variations in lipid and apolipoprotein concentrations in human leg lymph: effects of posture and physical exercise. Atherosclerosis 2004, 173:39-45
53. B. Interewicz, W.L. Olszewski, L.V. Leak, E.F. Petricoin, L.A. Liotta. Profiling of normal human leg lymph proteins using the 2-D electrophoresis and SELDI-TOF mass spectrometry approach. Lymphology 2004, 37:65-72
54. T. Kujiraoka, H. Hattori, M. Ito, M.N. Nanjee, M. Ishihara, M. Nagano, T. Iwasaki, CJ. Cooke, Olszewski WL, Stepanova IP, Egashira T, Miller NE. Effects of intravenous apolipoprotein A-I/phosphatidylcholine discs on paraoxonase and platelet-activating factor acetylhydrolase in human plasma

and tissue fluid. *Atherosclerosis* 2004 Sep;176(1):57-62

55. Olszewski W.L.

Contracility Patterns of Human Leg Lymphatic in Various Stages of Obstructive Lymphadema

Ann N Y Acad Sci 2008; 1131:110-118

56. Victor Huang, Anke S. Lonsdorf, Lei Fang, Emily Cha, Hong Zhang, Keisuke Nagao, Marzanna Zaleska, Waldemar L. Olszewski, and Sam T. Hwang

Cutting Edge: Rapid Accumulation of Epidermal CCL27 in Skin-Draining Lymph Nodes following Topical Application of a Contact Sensitizer Recruits CCR10-Expressing T Cells

J Immunol 2008; 180(10):6462-6

57. W. L Olszewski, P. Jain, G. Ambujam, M. Zaleska, M. Cakala.

Anatomical distribution of tissue fluid and lymph in soft tissues of lower limbs in obstructive lymphedema—hints for physiotherapy

Phlebology. 2009;16(3):283-289

58. A. Domaszewska-Szostek, M. Zaleska , W. L. Olszewski

The influence of tissue fluid/lymph cytokines and growth factors on human keratinocytes proliferation and differentiation

Transpl Proc.2009; 41:3269-3271

59. W.L Olszewski, P. Jain, G. Ambujam, M. Zaleska, M. Cakala

Where do lymph and tissue fluid accumulate in lymphedema of lower limbs caused by obliteration of lymphatic collectors

Lymphology 2009; 42:105-111

60. Waldemar L Olszewski, Pradeep Jain, G. Ambujam, Marzanna Zaleska, Marta Cakala

Topography of accumulation of stagnant lymph and tissue fluid in soft tissues of human lymphedematous lower limbs

Lymph Res Biol. 2010;7(4):239-245

**Books:**

1. W.L. Olszewski. CRC Handbook of Microsurgery Vol I, CRC Press, Inc. Boca Raton, Florida 1984.
2. W.L. Olszewski. Peripheral Lymph Formation and Immune Function. CRC Press, Inc. Boca Raton, Florida 1985
3. W.L. Olszewski. In Vivo Migration of Immune Cells. CRC Press, Inc. Boca Raton, Florida 1987.
4. W.L. Olszewski. Lymph Stasis: Pathophysiology, Diagnosis and Treatment. CRC Press, Inc. Boca Raton, Florida 1991