



Laser Florence

A WINDOW ON THE LASER MEDICINE WORLD

LASER FLORENCE 98 RAPPORT

As a follow up to the successful meeting "Laser Florence 1997" the European Medical Laser Association (EMLA) organized in Florence the Laser Florence 98, 1st International Expomeeting & Courses on Laser and Computer in Human Health . The event was sponsored by most outstanding national and international institutions such as: The President Of The Italian Republic, The University Of Siena, The Italian Foreign Office, The Italian Ministry Of Health, The World Health Organization (WHO), The American Academy Of Dermatology (AAD), The Society Of Photo-Optical Instrumentation Engineers (SPIE), The Laser Institute Of America (LIA), The EastEuropean Confederation Of National Societies Of Plastic Aesthetic Surgery And Aesthetic Medicine (ESPAS), The Medical European Network Society (MENS), The European Society Of Aesthetic Medicine, The Italian Society Of Aesthetic Medicine, The Italian Society Of Phlebo-Lymphology, The Italian College Of Phlebology, The Antica Officina Di Santa Maria Novella, The Scuole Pie Fiorentine, The Institute For Laser Medicine Of Florence, Prosperius-Villa Cherubini Hospital, The Commune Of Florence, The Region Of Tuscany, The Ente Cassa Di Risparmio Di Firenze. This year too, participation and interaction among world-famous scientists led to formulation of conclusion on the state of the art of laser action on various sectors of medicine and surgery. In fact every one of the speakers, usually Director of a university or a hospital institution is known for at least a monograph and for hundreds of pertinent scientific papers published in the most authoritative technical journals. Five practical courses were held before the Congress: laser phlebology, co-directed by Leonardo Longo (Siena University, Italy) and Christine Dierickx (Harvard Medical School Boston U.S.A). Laser Resurfacing, co-directed by Leonardo Longo and Khalil Khatri Wellman Laboratories, Massachussets General Hospital, Harvard Medical School, Boston Laser Cosmetic Surgery, co-directed by L. Longo and Douglas Key, LaserDerm International, Portland Laser Rehabilitation, co-directed by Z. Simunovic, Switzerland and Mariano Postiglione, former director WHO Laser Engineering and Vibrometry, co-directed by M. Pascu, director Atomic Institute Bucharest University and by E.P. Tomasini, director Institute of Mechanics University of Ancona All these courses included a theoretical part, a practical part, consisting of patient treatment and video-telematic transmission and final evaluation tests of self-learning and teacher performance. Therefore the first three courses were included officially in the Continuing Medical Education Programme, with eight hour-accreditation for each course by the American Academy of Dermatology. In fact North-American physicians are due to keep themselves up-to-date, by attending every year a certain number of courses and congresses which receive credit by their professional associations. The absence of representation from the Italian Society of Dermatology and Plastic Surgery duly invited by EMLA has been noted and regretted. During the courses advantages and disadvantages of all types of lasers and other light sources used in each sector were reviewed and some of the best instruments were used in the practical demonstrations. Prof. G. Muller, University of Berlin, official representative of SPIE, was the first speaker and reviewed laser use in diagnosis, with special reference to tumors and chronic diseases. In these cases laser can be used to evidence tissue direct fluorescence or to activate photodynamic substances, with particular tropism towards different types of tissues in the various phases of growth and maturation. Laser tissue interaction was reviewed by Prof. Pascu, Bucharest University, and by Prof. Wilhelm Waidelich, München University. Prof. E.P. Tomasini, Ancona University, brilliantly described vibrometric laser doppler use in medical diagnosis. Medico-legal aspects were the subject covered by P. Donati and by M. Grave, Forensic Medicine Institute, Florence University, whereas Prof. M. Marchi, Institute of Statistics of Florence University, described the correct approach in the use of



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medical statistics in biomedical research. Penny Smalley, Director... Chicago described tasks and functions of professional nurses in the use of laser technologies, underlining protection aspects as well as active and passive safety procedures. Prof. Kalo representative of the WHO Regional Office for Europe, explained WHO guide lines in the laser field. The session on laser in uro-genital surgery aroused special interest. Prof. A. Hofstetter, Director Urology Clinic, München University, provided the latest information on photodynamic diagnosis and treatment in cancer of the bladder, stressing the importance to use laser togetherwith photosensitive substances activated by the lasers themselves in the diagnosis and therapy of these lesions. R. Waidelich illustrated the use of photodynamic therapy in tumors of the lower urinary tract, associated with 5-aminolevulinic acid, whereas Prof. T. Lotti, Past President of the Italian Society of Urology and Dr. D. Prezioso, Naples University, described several cases of Nd-Yag laser treatment of superficial carcinoma of the bladder. M.D'Ovidio, Rome, listed advantages and disadvantages of laser prostatectomy and M. Postiglione, Florence reviewed the state of the art on laser therapy of Induratio Penis Plastica and G. Bandieramonte, Milano, presented laser treatment of uro-genital lesions. A. Vaitkuvieni, University of Vilnius, Lituania, could not be present, but forwarded a very interesting communication on change of spontaneous and laser induced fluorescence of endometrial mucosa during the various fases of normal and pathological menstrual cycle. L.Corcoc, Sassari University, provided the latest information on laser use in proctological surgery, haemorrhoids, ulcerations, fistulae, and rectum cancer. The mechanism of action of anti-inflammatory, analgesic and regenerative effects of non-surgical lasers were reviewed by R. Lubart, Bar-Ilan University, C. Antipa, Bucharest University, G.D. Baxter, Ulster University, C. Enwemeka, Kansas University. Clinical results of laser application on epicondylitis, epitrocleitis and wound healing on man and experimental animals were presented by Z. Simunovic, Switzerland and T. Trobonjaca, Croatia, in double-blind studies. L.Wilden, Germany summarized eight years experience on laser therapy in chronic diseases of the ear. S. Giavelli, Milan, President Italian Society of Laser Medicine and Surgery, talked about diseases of the hand in the elderly and about rheumatoid arthritis.(C. Ailioaie et all, Rumenia). K. Samoiolova, Director Biology Institute University of S. Petersburg illustrated all the effects of non surgical laser on different haematochemical and immunological parameters after direct irradiation of the blood. The Russian school has almost twenty years of experience on this type of application, almost unknown in the western world. Nick Nicolopoulos, President World Association for Laser Therapy (WALT), led the session on non-surgical lasers. A full session was devoted to laser in odontoiatry presided by Prof. G. Lynn-Powell, Utah University, President of the International Society for Laser Dentistry, who demonstrated laser induce pulpar thermic variations, while Dr. Reyto, Beverly Hills California, illustrated laser induce teeth whitening. L. Scalise, Ancona University, illustrated dental vibration analysis in normal and pathological conditions. A. Tenenbaum, Moscow Academy of Sciences, showed a technique of surgical treatment in ATM syndrome performed directly on the patient. Techniques of laser resurfacing where brilliantly reviewed by K. Khatri and Douglas Key, with special reference to patient management before, during and after intervention, comparing results among different types of lasers used. It has been demonstrated that the laser of choice for techniques of resurfacing at present is undoubtedly Erbium-Yag of appropriate power, whereas CO2 laser is to be used only in some special cases, alone or in association with chemical peeling. Christine Dierickx, J. Hebrant, Belgium, and Longo proposed a codification on selective indications of lasers in phlebology, keeping in mind cost/benefit and risk/benefit, as well as on the various types of lasers to be used in each specific case. In this sector a complete identity of view was reached among different groups (USA, Belgium and Italy) which is a good omen for the



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future. P. Frignano and B. Giannotti, Dermatology Clinic, Florence University, reviewed the present knowledge on melanogenesis and metabolism of melanin, in order to justify scientific use of different types of laser treatment on skin pigmentation. A special seminar was devoted to professional nursing with the participation of Penny Smalley, Chicago, and Jo Lindsay, Italian Association of Professional Nursing and A. Brandi, President Tuscan Association of Professional Nurses. This meeting was officially recognized by North American Nursing Association, and was included in the Continuing Medical Education Programme and given five hours accreditation. The need is felt in Italy for the establishment of a university degree in Nursing Sciences, therefore it is appropriate at this stage to define tasks and functions of nurses in the use of laser technology. "Arrivederci" next October at Laser Florence '99.

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