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Meeting Report

Cancer Therapies for the 21st Century. 9th Annual Meeting of the International Society for Oral Oncology, 2–4 June 1994, National Institutes of Health, Bethesda, Maryland, U.S.A.

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THE 9TH ANNUAL meeting of the International Society for Oral Oncology (ISOO) was conducted in June 1994 at the National Institutes of Health (NIH). The theme for the conference was "Cancer Therapies for the 21st Century" (Dr Phil Fox, programme chair). Ninety-nine registrants from the U.S.A., Europe and Asia were in attendance, and represented a variety of health professions including dental medicine, medicine, and dental hygiene.

Welcoming remarks were provided by ISOO President Dr Douglas Peterson (University of Connecticut) and Dr Dushanka Kleinman (Acting Director, National Institute of Dental Research; NIDR). Several prominent cancer researchers from the NIH then presented lectures. Dr Steven Rosenberg (National Cancer Institute; NCI) opened the scientific session with "The Immunotherapy and Gene Therapy of Cancer". History, current status, and research directions relative to manipulation of immune system subsets to more effectively cause tumour rejection were reviewed. Uses of interleukins and tumour infiltrating lymphocytes, as well as potential vaccines for selected malignancies, were also addressed. Dr Michael Sporn (NCI) discussed "Prevention of Cancer with Retinoids and Deltanoids: New Agents and Their Mechanism of Action". These moieties are being increasingly examined as to their efficacy in therapies for selected cancers, including oral squamous cell carcinoma.

The Presidential Lecture was delivered by Dr Samuel Broder (Director, NCI). Dr Broder emphasized the central importance of studying oral malignancy at both molecular and clinical levels. In addition, the value of using the oral cavity as a model for studying the aetiopathogenesis and management of mucosal cancers was highlighted. These comments were subsequently reinforced in lectures by Drs Sol Silverman (University of California San Francisco), Robert Mecklenburg (NCI), Janet Yellowitz (University of Maryland), Douglas Morse (University of Connecticut), and Charles Liebow (State University of New York/Buffalo). Collectively, these discussions highlighted the critical need to develop more aggressive preventive and interventive strategies to reduce morbidity and mortality associated with oral malignancy and its treatment.

Fundamentals of gene therapeutic approaches were addressed by Dr Paul Tolstoshev (Genetic Therapy, Inc.). Dr Brian O'Connell (NIDR) subsequently reviewed recent advances in supportive therapies for cancer patients. These two discussions illustrated genetically-based mechanisms to be considered in treating cancer and associated complications. The potential benefit of biomolecular approaches to manipulate tissues such as salivary glands to reduce severity of sequelae secondary to cancer therapy, and to deliver therapeutic molecules to the oral cavity and upper digestive tract, was also emphasized.

Advances in radioprotection strategies were discussed by Dr Joseph Weiss (Armed Forces Radiobiology Research Institute). Two lectures addressing early and late reactions to head and neck radiotherapy were then presented by Drs Fred Spijkervet and Arjan Vissink (University Hospital, Groningen, The Netherlands). Continued study of selected sulphhydryl compounds, other antioxidants and receptor-mediated agents (e.g. immunomodulators and cytokines, eicosanoids, and agents that increase cAMP) is warranted. New head/neck radiation dosing protocols (hyperfractionation, accelerated fractionation) are likely to increase severity of early oral side effects (e.g. mucositis, oral infections, weight loss). Hyposalivation, trismus and mucositis remain major factors affecting quality of life, even with these radiobiologic advances.

Several free paper sessions were also conducted. Abstracts addressed the use of new technologies, including low energy

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laser therapy or selected biologic response modifiers, in reducing severity of oral mucositis induced by intensive cytoreductive cancer therapy. While reports are preliminary, such interventions may prove to be efficacious clinically; studies are ongoing. Themes of other free paper sessions included oral infection prevention in immunocompromised cancer patients, management of xerostomia, and biotechnology in prosthodontic rehabilitation of the head and neck cancer patient.

Scientific advances were placed in perspective by a review of progress since the 1989 NIH Consensus Development Conference "Oral Complications of Cancer Therapies: Diagnosis, Prevention, and Treatment" (Dr Douglas Peterson). Several research studies published since 1989 are directly relevant to research directions proposed at the conference, including: (a) improving criteria for assessment of oral complications; (b) understanding mechanisms of cancer treatment injury of oral tissues; and (c) developing technologies to reduce that injury.

The 10th anniversary ISOO meeting "Advances in Marrow Transplantation" has been conducted in Seattle, Washington, U.S.A., 1–3 June 1995. Prevention and management of oral complications in bone marrow transplant patients were emphasized. Sessions relative to fundamental and applied research in this subject, as well as clinical care issues, were conducted. The 11th annual session will occur in Stockholm, Sweden 13–15 June 1996, and will address future directions in oral cancer prevention, detection and treatment.

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