

Oral presentation

Open Access

The clinical application of elastic scattering spectroscopy in the head and neck

Colin Hopper

Address: Head & Neck Centre, University College London Hospital, London, UK

from 1st Scientific Meeting of the Head and Neck Optical Diagnostics Society
London, UK. 14 March 2009

Published: 28 July 2009

Head & Neck Oncology 2009, 1(Suppl 1):O2 doi:10.1186/1758-3284-1-S1-O2

This abstract is available from: <http://www.headandneckoncology.org/content/1/S1/O2>

© 2009 Hopper; licensee BioMed Central Ltd.

Optical diagnostics have proved to be a reliable resource that can be used to give an instant diagnosis of soft and, more recently, hard tissue diseases. In the field of head and neck malignancy, most of the experimental spectroscopy work has been performed using fluorescence spectroscopy, Raman spectroscopy, elastic scattering spectroscopy, micro-endoscopy and optical coherence tomography.

Elastic scattering spectroscopy (ESS) has proved to be a promising method for detecting premalignant and malignant changes in oral tissues, with high sensitivity and specificity. Several head and neck tissues, including lymph nodes and bones, have been interrogated using ESS, which detects changes at the cellular and subcellular level, with very promising results.

We describe our experience in the clinical application of elastic scattering spectroscopy in the head and neck.