SYSTEM FOR DETECTING PRECANCEROUS AND CANCEROUS TISSUE

Abstract

A method and system are provided for determining a condition of a selected region of epithelial tissue. At least two current-passing electrodes are located in contact with a first surface of the selected region of the tissue. A plurality of measuring electrodes are located in contact with the first surface of the selected region of tissue as well. Electropotential and impedance are measured at one or more locations. An agent may be introduced into the region of tissue to enhance electrophysiological characteristics. The condition of the tissue is determined based on the electropotential and impedance profile at different depths of the epithelium, tissue, or organ, together with an estimate of the functional changes in the epithelium due to altered ion transport and electrophysiological properties of the tissue.

Figure 1