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(54) Title: METHOD OF DETECTING FIBROUS TISSUE IN A BIOLOGICAL SPECIMEN USING CO-LOCALIZED IMAGES GENERATED BY SECOND HARMONIC GENERATION AND TWO PHOTON EMISSION

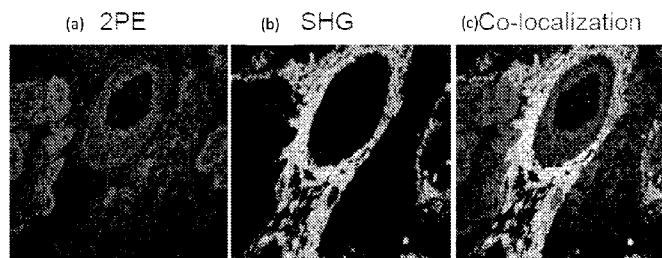


FIG. 3

(57) Abstract: The present disclosure offers a method of detecting the presence of fibrous tissue deposited to a biological specimen or tissue sample. Preferably, the method comprises the steps of illuminating the specimen using an electromagnetic radiation of an excitation wavelength that the specimen contains excitable materials or compound to result in auto-fluorescence emitting a first electromagnetic signal caused by two-photon excitation, the specimen contains non-linear materials to generate a second electromagnetic signal in the form of second harmonic wave pursuant to the illuminating step; recording the first and the second electromagnetic signals emitted from the specimen; co-localizing the recorded first and second electromagnetic signals to generate an image; and detecting presence of the fibrous tissue deposited to the specimen using the generated image. More preferably, the light source is a laser beam or the like operable to induce two-photon excitation in the given tissue sample.