New detection technique shines light on esophageal cancer.

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Chronic irritation can often trigger cellular changes that lead to cancer. This is sometimes the case in patients with repeated acid reflux, a condition in which the esophagus is repeatedly exposed to irritating acid from the stomach. Repeated exposure to this acid can result in an overall change in the cells' structure, so much so that they may no longer resemble esophageal cells. At this point, they pose the risk of developing into cancer.

One of the crucial components of cancer treatment is early detection. The sooner a malignancy is found, the higher the possibility of stopping it from spreading. Researchers at Duke University have developed a new technique for detecting cancerous and pre-cancerous esophageal cells. They pass a tube through the nose and into the esophagus, where they then shine quick flashes of light and observe the response of suspicious areas of tissue. Malignant and pre-malignant cells have a characteristic response to light that distinguishes them from healthy, normal cells. This technique may further the effectiveness of esophageal cancer treatment by offering a way of detecting the threat as soon as possible.

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