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\*\*\*\*Researchers find personality traits  
related to peptic ulcers

DALLAS--Is there an "ulcer personality?" Do some people have personality traits that may predispose them to form peptic ulcers?

Recent research suggests that the answer is "yes," according to gastroenterologists Dr. Charles Richardson and Dr. Mark Feldman, who jointly hold the Patterson Professorship in Internal Medicine at The University of Texas Health Science Center at Dallas. Besides their affiliation with UTHSCD, Richardson is chief of staff at the Dallas Veterans Administration Medical Center and Feldman is associate chief of staff for research at the Dallas VAMC.

Conducting studies both separately and together at the VA medical center, the two clinical investigators have found an entire gamut of psychological disturbances in those who form peptic ulcers, as well as an identifiable set of behavioral risk factors.

Peptic ulcers are defects or holes in the lining of the stomach (gastric ulcer) or upper small intestine (duodenal ulcer). Originally all ulcers in the upper gastrointestinal tract were believed to be caused by the aggressive action of hydrochloric acid and pepsin on the mucosal lining of the stomach. Therefore they became known as "peptic ulcers."

Feldman reported in the November issue of Gastroenterology that in groups of ulcer patients and normal control volunteers, the ulcer patients experienced approximately the same number of potentially stressful life events as normal subjects. But the ulcer patients perceived the events as having a far more negative impact on their lives.

Feldman's studies also confirm that there is a higher incidence of personality disorders in ulcer patients than controls although no one ulcer personality disorder was found consistently. The most prominent personality disorder in his study was "hypochondriasis"; that is, the ulcer patients tended to be hypochondriacs and were often complainers, preoccupied with their own aches and pains, and pessimistic.

He found that ulcer patients, as a group, are excessively dependent. Yet his study shows that ulcer patients have less social support than others, an area which has been largely ignored in past ulcer research.

Finally, Feldman showed a much higher frequency of emotional distress, in the form of depression and anxiety, in ulcer patients than in controls.

While the mechanisms by which emotional stress contributes to ulcer disease are unclear, it is known that certain emotions, such as hostility, resentment, guilt and frustration are associated with increased gastric acidity. Studies also show that, when stress is alleviated, acid secretion may diminish and symptoms of ulceration may disappear.

Behavioral risk factors for peptic ulcer disease, according to the doctors, include the use of tobacco, alcohol, coffee and aspirin. Smoking cigarettes, they say, is additionally harmful once ulcers form since it delays ulcer healing. Death due to peptic ulcer disease is more likely among patients who smoke than those who do not.

In their search for a cure, Feldman and Richardson found that a chief factor separating ulcer patients from the average person is a profound overproduction of stomach acid. They discovered that duodenal ulcer patients secrete twice as much acid into the stomach over a 24-hour period as do normal persons, and the amount of acid secreted is elevated both during the day and night.

The reasons for overproduction of acid in some individuals with duodenal ulcers and not in others remains largely a mystery, but the doctors have identified several mechanisms by which acid is secreted.

(more)



For example, thinking, seeing, smelling, tasting and chewing food can trigger acid secretion, their studies show. And when these factors stimulate the vagus nerve, originating in the brain, parietal cells in the stomach are given the signal to secrete acid. In addition, endocrine cells in the stomach are stimulated to release the hormone, gastrin, which then further stimulates acid secretion. Richardson and Feldman have measured increased acid and gastrin levels in normal volunteers when appetizing food was either discussed with the subjects or actually placed in front of them so that they could see, smell, and think about the food.

Peptic ulcer disease is likely caused by several different factors. For example, increased acid secretion and emotional stress may be important mechanisms leading to ulcer formation in some patients while smoking or ingestion of drugs such as aspirin may play a major role in others. Genetic predisposition may be a factor in ulcer formation in certain "ulcer families."

There are other ulcer patients in whom there is no known risk factor or explanation for ulcer disease. In these patients some presently unknown mechanism or mechanisms presumably cause ulcers. Hopefully, with further research, additional causes of ulcer disease will be discovered and ultimately a cure will be available for patients with ulcer disease.

Richardson and Feldman estimate that approximately 16 million people in the United States -- one out of every 10 men and one out of every 25 women -- will develop a peptic ulcer at some time during their lives. Each year 2.5 million Americans visit physicians for ulcer-related problems and one million of those patients are confined to bed for one or more days because of ulcer disease. The cost to the American economy in lost time from work and medical expenses is over \$3 billion a year.

The main symptom of a peptic ulcer is a burning, gnawing pain, sometimes resembling a "hunger pain." Usually the pain is localized in a small spot in the upper middle abdomen but sometimes, depending on the location of the ulcer, pain may be felt in the back or lower chest.

Complications of an ulcer -- bleeding, perforations and obstruction of the intestinal tract -- are frequently serious. They often lead to surgery and can be fatal.

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NOTE: The University of Texas Health Science Center at Dallas comprises Southwestern Medical School, Southwestern Graduate School of Biomedical Sciences and the School of Allied Health Sciences.