

Zollinger-Ellison syndrome

Definition

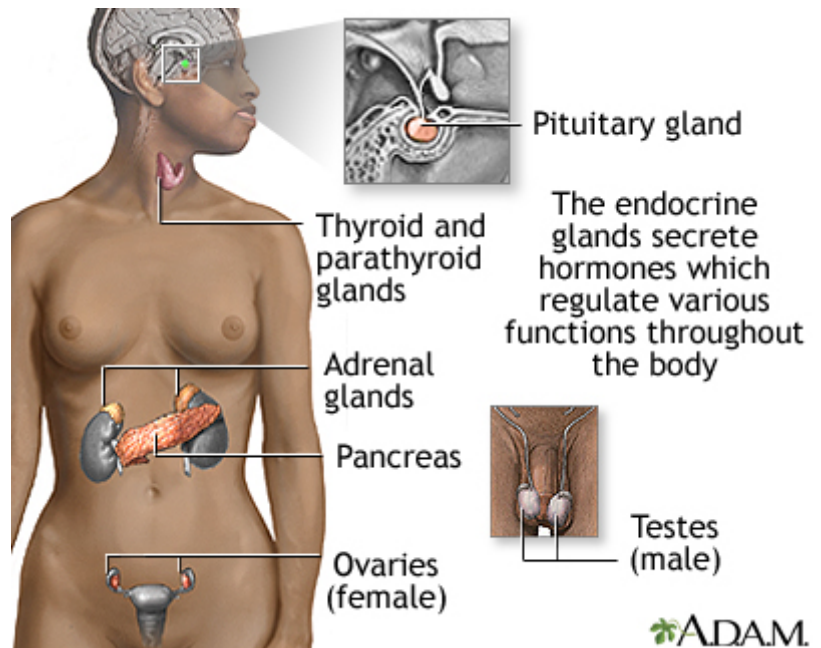
Zollinger-Ellison syndrome is a condition in which the body produces too much of the hormone gastrin. Most of the time, a small tumor (gastrinoma) in the pancreas or small intestine is the source of the extra gastrin in the blood.

Alternative Names

Z-E syndrome; Gastrinoma

Causes

Zollinger-Ellison syndrome is caused by tumors. These growths are most often found in the head of the pancreas and the upper small intestine. The tumors are called gastrinomas. High levels of gastrin cause production of too much stomach acid.



Gastrinomas occur as single tumors or several tumors. One half to two thirds of single gastrinomas are cancerous (malignant) tumors. These tumors often spread to the liver and nearby lymph nodes.

Many people with gastrinomas have several tumors as part of a condition called multiple endocrine neoplasia type I (MEN I). Tumors may develop in the pituitary gland (brain) and parathyroid gland (neck) as well as in the pancreas.

Symptoms

Symptoms may include:

- Abdominal pain
- Diarrhea
- Vomiting blood (sometimes)
- Severe esophageal reflux (GERD) symptoms

Signs include ulcers in the stomach and small intestine.

Exams and Tests

Tests include:

- Abdominal CT scan
- Calcium infusion test
- Endoscopic ultrasound
- Exploratory surgery
- Gastrin blood level
- Octreotide scan
- Secretin stimulation test

Treatment

Drugs called proton pump inhibitors (omeprazole, lansoprazole, and others) are used for treating this problem. These drugs reduce acid production by the stomach. This helps the ulcers in the stomach and small intestine heal. These medicines also relieve abdominal pain and diarrhea.

Surgery to remove a single gastrinoma may be done if the tumors have not spread to other organs. Surgery on the stomach (gastrectomy) to control acid production is rarely needed.

Outlook (Prognosis)

The cure rate is low, even when it is found early and the tumor is removed. However, gastrinomas grow slowly. People with this condition may live for many years after the tumor is found. Acid-suppressing medicines work well to control the symptoms.

Possible Complications

Complications may include:

- Failure to locate the tumor during surgery
- Intestinal bleeding or hole (perforation) from ulcers in the stomach or duodenum
- Severe diarrhea and weight loss
- Spread of the tumor to other organs

When to Contact a Medical Professional

Call your health care provider if you have severe abdominal pain that does not go away, especially if it occurs with diarrhea.

References

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