

中文題目：胃胸腔症候群

英文題目：Gastro-Chest Syndrome (GCS)

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#### Introduction:

Precordial discomfort is a common symptom in the daily clinical practice. Usually, pulmonary and cardiac related causes are the top priorities on the differential diagnosis list. However, gastric originated causes should also play a role in the etiology of the precordial discomfort.

We use this term “GCS, Gastro-Chest Syndrome” to point out that gastric related pathology can also cause chest area symptoms, such as precordial discomforts, shortness of breath, chest pain...etc.

#### Materials and Method:

From January 2017 to June 2019, at our clinic we collected 15 cases of the clinical presentation of precordial discomfort, shortness of breath and/or precordial chest pain, with negative findings on Chest X ray and ECG. Some cases received EGD (Esophagogastroduodenoscopy) and acute superficial gastritis were found. After treatment of H<sub>2</sub> (histamine H<sub>2</sub> receptors) blocker, or PPIs (Proton-pump inhibitors), the symptom of precordial discomfort improved.

#### Results:

##### A. Case report:

A 64 year old male patient, businessman, who presented the symptom of precordial discomfort on and off for one year. He denied cough, wheezing, fever, or lower leg edema; but sometime also suffered from epigastric discomfort or fullness. Coronary artery disease was told and Aspirin was prescribed. Chest X ray and electrocardiogram (ECG ) revealed negative findings, without evidence of cardiac ischemic change. EGD revealed acute superficial gastritis. Under the impression of gastro-chest syndrome, aspirin was discontinued, and then PPIs and antacids were given, the long standing symptoms of precordial discomfort and abdominal fullness subsided gradually.

## B. Case series

	Sex	age	symptom	CXR	ECG	EGD	Treatment	Result
1	M	41	PD, CP	NP	NP	Gastritis	PPI	Improved
2	F	50	CP	NP	NP		H2 blocker	Improved
3	M	78	PD	NP	NP		H2 blocker	Improved
4	F	51	PD,PP	NP	NP	Gastritis	PPI	Improved
5	F	41	PD, PP			Gastritis	PPI	Improved
6	M	26	PD	NP		Gastritis	PPI	Improved
7	M	76	PD	NP	NP		H2 Blocker	Improved
8	F	53	PD,PP				H2 blocker	Improved
9	M	60	CP	NP			H2 blocker	Improved
10	M	51	PD,SOB		NP	Gastritis	PPI	Improved
11	F	65	PD	NP	NP		H2 blocker	Improved
12	F	58	CP	NP	NP		H2 blocker	Improved
13	M	67	PD	NP	NP	Gastritis	PPI	Improved
14	F	58	PD, CP	NP	NP		H2 blocker	Improved
15	F	69	PD	NP	NP	Gastritis	PPI	Improved

PD, Precordial Discomfort; SOB, Shortness of Breath; CP, Chest Pain;  
PP, Palpitation; NP, Nothing Particular.

### Discussion:

1. Regarding the differential diagnosis of precordial discomfort, gastric factor should be put into consideration, in addition to pulmonary, cardiac and other causes.
2. Detailed history taking, physical examination, or additional exams such as: chest X-ray, ECG or EGD can help making final diagnosis.
3. The gastro-chest syndrome may be overlapped with GERD (Gastroesophageal reflux disease). But the predominant clinical symptoms of gastro-chest syndrome are precordial discomfort, shortness of breath and chest pain, while most of GERD patients present with acid regurgitation.
4. The hypothetical pathophysiology of gastro-chest syndrome : The gastric distension pushes the diaphragm upward and causes limitation of diaphragm movement, therefore, GCS patients complain of precordial discomfort or shortness of breath.
5. With treatment of antacid, H2 inhibitors, or PPI, the response of GCS is quite remarkable.

6. The worst scenario was usually seen when gastro-chest syndrome was thought as asthmatic or coronary illness, and medicine such as bronchodilator or aspirin was prescribed, which made the clinical symptom of precordial discomfort even worse.