

## Autoimmune Gastritis

- Autoimmune gastritis accounts for less than 10% of cases of chronic gastritis. ↓ acidity
- In contrast with that caused by *H. pylori*, Autoimmune gastritis typically sparing the antrum and induces hypergastrinemia.
- Autoimmune gastritis is characterized by antibodies to parietal cells and intrinsic factor are present early in disease, but pernicious anemia develops in only a minority of patients.
- The median age at diagnosis is 60 years, and there is a slight female predominance.

\* Common location body of stomach \*

- Autoimmune gastritis often is associated with other Autoimmune disease.

RA / Diabetes.

• Autoimmune gastritis often is associated with other Autoimmune disease.

RA / Diabetes.

### PATHOGENESIS

Ab against

• Autoimmune gastritis is associated with loss of parietal cells, which secrete acid and intrinsic factor. Deficient acid production stimulates gastrin release, resulting in hypergastrinemia and hyperplasia of antral gastrin-producing G cells. → Precancer neuroendocrine tumor.

• Lack of intrinsic factor disables ileal vitamin B12 absorption, leading to B12 deficiency and megaloblastic anemia (pernicious anemia). → RBCs Large in size /

• Although H. pylori can cause hypochlorhydria, it is not associated with achlorhydria or pernicious anemia, because the parietal and chief cell damage is not as severe as in autoimmune gastritis.

بیم استقامت  
Neural symptoms  
\* خدرانه بالاییین  
\* Paralysis of Lower Limb  
\* لازم يتعالج لانه  
Neuro injury

↳ H. pylori ال  
بکسر کل ال  
Parietal Cells

\* كفا نفیس مستوی ال Gastrin ← فوسه دم

[لانه شرمون وينقل]  
عن طريق الدم

## MORPHOLOGY

- Autoimmune gastritis is characterized by diffuse **damage of the oxyntic** (acid-producing) **mucosa** within the body and fundus. Parietal Cell.
- With **diffuse atrophy**, the oxyntic mucosa of the body and fundus appears markedly thinned, and rugal folds are lost.
  - المعدة يتكون طبقات
- The inflammatory infiltrate more commonly is composed of lymphocytes, macrophages, and plasma cells;
- In contrast with *H. pylori* gastritis, the inflammatory reaction most often is deep and centered on the gastric glands.



most often is deep and centered on the gastric glands.

\* لا يتم تمييزهم لأن الدواء يتكفك \*

Table 14-2 Characteristics of Helicobacter pylori-Associated and Autoimmune Gastritis

Feature	Location Antrum of Stomach H. pylori-Associated Antrum	Autoimmune Body Body of Stomach (Gastritis)
Inflammatory infiltrate	Neutrophils, subepithelial plasma cells	Lymphocytes, macrophages
Acid production	Increased to slightly decreased	Decreased
Gastrin	Normal to decreased	Increased
Other lesions	Hyperplastic/inflammatory polyps	Neuroendocrine hyperplasia
Serology	Antibodies to H. pylori	Antibodies to parietal cells (H <sup>+</sup> K <sup>+</sup> -ATPase, intrinsic factor)
Sequelae	Peptic ulcer, adenocarcinoma, lymphoma	Atrophy, pernicious anemia, adenocarcinoma (carcinoid tumor)
Associations	Low socioeconomic status, poverty, residence in rural areas	Autoimmune disease, thyroiditis, diabetes mellitus, Graves disease

Superficial [localize].

Complication:

\* Lymphoma → tumor associated with pylori  
Prolong exposure

↓ B12  
Neuroendocrine tumor.  
تقلص جدار المعدة  
Pylori.

\* Hypochlorhydria → Decrease stomach acid\*  
[↓ acid production in stomach].

### FUNDIC GLAND POLYPS.

FLAMMATORY AND HYPERPLASTIC POLYPS.

نوعان من الحميدة  
في المعدة

\* قد يكتشف بال  
endoscopy.

### Gastric adenomas

in Mucosa

\* Adenoma → Same polyps with dysplasia.

- Gastric adenomas are most commonly located in the antrum.
- By definition, all gastrointestinal adenomas exhibit epithelial dysplasia, which can be classified as low- or highgrade
- Both grades may include enlargement, elongation, and hyperchromasia of epithelial cell nuclei, epithelial crowding, and pseudostratification.
- High-grade dysplasia is characterized by more severe cytologic atypia and irregular architecture, including glandular budding and gland-within-gland, or cribriform, structures.

Cellular / glandular changes

عن طريق ال  
Cellular +  
glandular change  
تبدل أوسر بين ال  
high or low  
grade \*

Need  
follow up

Gastric cancer

# Gastric cancer

• Gastric cancer is more common in lower socioeconomic groups and in persons with *multifocal mucosal atrophy* and

intestinal metaplasia. PUD does not impart an increased risk of gastric cancer. Prolong H. pylori → Gastric Cancer.

\* Cancer of Gland \*

← Most common  
• Gastric adenocarcinomas are classified according to their location in the stomach as well as gross and histologic morphology.

3 types of cancer

• The Lauren classification that separates gastric cancers

into intestinal and diffuse types. → bad progression.

. [Goblet Cell]

\* الاختلاف في النوع \*

Progression \*

\* Intestinal Cancer → good prognosis → أكثر يعيشوا \*



- **Intestinal-type cancers** tend to be bulky and are composed of glandular structures similar to esophageal and colonic adenocarcinoma.
- They typically grow along broad cohesive fronts to form either an exophytic mass or an ulcerated tumor. ↳ Infiltration + Progression.
- The neoplastic cells often contain apical mucin vacuoles, and abundant mucin may be present in gland lumina.
- **Diffuse gastric cancers** display an infiltrative growth pattern and are composed of discohesive cells with large mucin vacuoles that expand the cytoplasm and push the nucleus to the periphery, creating a signet ring cell morphology.  
بشبه الخاتم .
- These infiltrative tumors often evoke a desmoplastic reaction that stiffens the gastric wall and may cause diffuse rugal flattening and a rigid, thickened wall that imparts a "leather bottle" appearance termed linitis plastica.

\* Scarring / Fibrosis associated with Malignant Reaction \*

Intestinal-type adenocarcinoma consisting of an

Intestinal-type adenocarcinoma consisting of an elevated mass with heaped-up borders and central ulceration

من خلال الـ endoscope



\* Polyloid Lesion.

\* Any Cancer → infiltrate exophytic ulcerative.

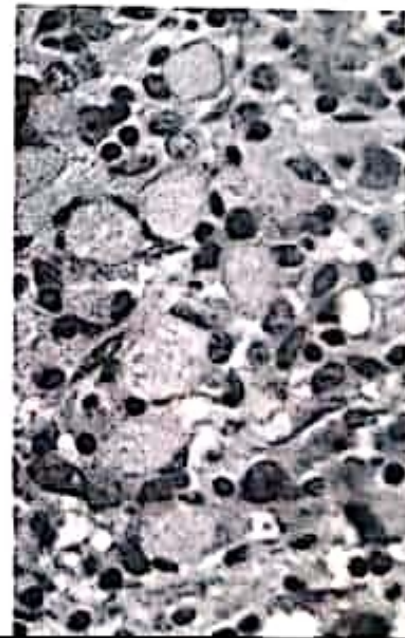


\* Diffusive type.

desmoplastic

A, Linitis plastica. The gastric wall is markedly thickened, and rugal folds are partially lost. B, Signet ring cells with large cytoplasmic mucin vacuoles and peripherally displaced, crescent-shaped nuclei.

\* whitish in color.



\* Linitis plastica  
[Rigid wall]

\* Signet ring  
nuclei at  
Peripheral

النواة على طرف  
من الخلايا

- Conical Features
- The mean age at presentation of Intestinal-type gastric cancer :

- Clinical Features

- The mean age at presentation of Intestinal-type gastric cancer :  
is 55 years, and the male-to-female ratio is 2 : 1.

\* GIT diseases Common in Male \*

- By contrast, the incidence of diffuse gastric cancer is occurs at similar frequencies in males and females.

- The depth of invasion and the extent of nodal and distant metastasis at the time of diagnosis remain the most powerful prognostic indicators for gastric cancer.

stage 3/4.

\* Stage [1] → بعيش لفترة طويلة

\* stage [3]+[4] → فشل

[\*type + grade + stage]

↳ depend on [T M N]

tumor mets lymph Node.

# Lymphoma

- Although extranodal lymphomas can arise in virtually any tissue, they do so most commonly in the gastrointestinal tract, particularly the stomach.
- Nearly 5% of all gastric malignancies are primary lymphomas, the most common of which are indolent lymphomas of *mucosa-associated lymphoid tissue (MALT)*, or **MALTomas**. →

\* هاي الاطراف علاجها مثل علاج

[Triple therapy] H. Pylori

بعد هيك بنعمل تنظيم لتأكله راجع أو لا

\* good prognosis

إذا اكتشفنا بعير.

# Carcinoid Tumor



[Triple therapy] H. Pylori  
إذا اكتشفنا بهيبي .  
يجب عليه نعمل تنظيم لتأكله راح أو لا .

Location  
important ←

## Carcinoid Tumor

- Carcinoid tumors arise from neuroendocrine organs (e.g., the endocrine pancreas) and neuroendocrine-differentiated gastrointestinal epithelia (e.g., G-cells).
- A majority are found in the gastrointestinal tract, and more than 40% occur in the small intestine.
- Gastric carcinoids may be associated with endocrine cell hyperplasia, chronic atrophic gastritis, and Zollinger-Ellison syndrome.
- The most current WHO classification describes these as low- or intermediate grade neuroendocrine tumors.
- It is important to recognize that site within the GI tract and extent of local invasion are also important prognostic indicators.

• ~~High grade neuroendocrine tumors termed neuroendocrine~~

→ Stomach  
+  
Appendix →  
bad progression

\* High Grade neuroendocrine tumors, termed neuroendocrine carcinoma, frequently display necrosis and in GI tract, are most common in the jejunum.

- Carcinoid tumors are intramural or submucosal masses that create small polypoid lesions .
- On histologic examination, carcinoid tumors are composed of islands, trabeculae, strands, glands, or sheets of uniform cells with scant, pink granular cytoplasm and a round to oval stippled nucleus.

### Clinical Features

- The peak incidence of carcinoid tumors is in the sixth decade.. Symptoms are determined by the hormones produced. For example, the *carcinoid syndrome* is caused by vasoactive substances secreted by the tumor that cause cutaneous flushing, sweating, bronchospasm, colicky abdominal pain, diarrhea, and right-sided cardiac valvular fibrosis.

Common ← \* ↑ Substan (P) \* More present in GI  
 \* ↑ insulin in plasma  
 [hypoglycemic Attack]

لا علاج .  
 [Flushing ←  
 [Pallor] Skin +  
 Abdominal  
 Colic]

Gastrointestinal carcinoid tumor (neuroendocrine tumor). A. Carcinoid tumors often form a submucosal. B. Shows the bland cytology that typifies carcinoid tumors. The chromatin texture, with fine and coarse clumps, frequently assumes a "salt and pepper" pattern.

للملح / الزنفل

ورقة بيضاء عطيت عليها ملح وفلفل ← إكلية متوزعة بطريقة عشوائية





The most important prognostic factor for gastrointestinal carcinoid tumors is location:

• Foregut carcinoid tumors, those found within the stomach, duodenum proximal to the ligament of Treitz, and esophagus, rarely metastasize and generally are cured by resection. good prognosis

\* Aggressive in small intestine.

• Midgut carcinoid tumors that arise in the jejunum and ileum often are multiple and tend to be aggressive. In these tumors, greater depth of local invasion, increased size, and presence of necrosis and mitosis are associated with poor outcome.

good prognosis

• Hindgut carcinoids arising in the appendix and colorectum typically are discovered incidentally. Those in the appendix

occur at any age and are almost ~~all~~ uniformly benign.

worst progression  
Location.

Lower endoscopy  
Common than  
upper  
endoscopy.

## Gastrointestinal Stromal Tumor

- The most common mesenchymal tumor of in the stomach. Stromal.



benign.

endorectal.

## Gastrointestinal Stromal Tumor

- The most common mesenchymal tumor of in the stomach.  
Stromal.
- Overall, GISTs are slightly more common in males. The peak incidence of gastric GIST is around 60 years of age, with less than 10% occurring in persons younger than 40 years of age.

Common in Male

- Approximately 75% to 80% of all GISTs have oncogenic, gain-of-function mutations of the gene [PDJFRA] gene \*  
encoding the tyrosine kinase c-KIT, \* Mutation in this gene \*



target therapy

[Imatinib] imatinib.

\* [Size / Mitotic index / Location] \* *عنايت اضره ال*  
*Prognosis.*

## Clinical Features

- Symptoms of GISTs at presentation may be related to mass effects or mucosal ulceration.
- Complete surgical resection is the primary treatment for localized gastric GIST.
- The prognosis correlates with tumor size, mitotic index, and location,
- Patients with unresectable, recurrent, or metastatic disease often respond to imatinib, an inhibitor of the tyrosine kinase activity of c-KIT and PDGFRA.

*benign / single*

*تجاوبوا بالبراد*

*لكن اضعه من*

*هليه ممكنه اعالج*

*بالكيماديو*