

Ca. stomach

Neoplasia of stomach

1. Benign : adenoma & polyp
2. Malignant : from epithelial cell (adenocarcinoma) , from connective tissue (GIST)*gastro intestinal stromal tumor ..

GIST either low grade (benign) or high grade (malignant)

Solid tumor more common in male than female & increase with age

10/100000 in united state

15/100000 in in UK

40/100000 in in west Uribe

70/100000 in japan

► Predisposing factor

△ More common causes;

- ✓ 1. Developed country: *GERD *proximal than distal part of stomach
- ✓ 2. Developing country: *H. pylori common *ca. in distal part of stomach

— Other causes;

- ⊙ Change in PH of stomach *such as antacid Therapy*
- ⊙ Atrophic gastritis (hypochlorhydria)
- ⊙ Pernicious anemia
- ⊙ Operation of peptic ulcer *or DU*
- ⊙ Gastric polyp & adenoma
- ✓ ⊙ alcohol intake
- ⊙ smoking
- ⊙ loss of antioxidants in diet

*Ca. in stomach depend on environmental effect than genetic

◇ Pathology

- ✓ ⊙ Male > female
- ✓ ⊙ Solid tumor
- ✓ ⊙ Increase with age
- ✓ ⊙ Microscopic:

Gastric ca either proliferative or infiltrative or ulcerative

Two type: intestinal type presented as mass
diffused type whole wall of stomach affected

(EGC) ⌚ Japanese use OGD to detect ca. at early stage
{ Early Gastric Ca: Early stage ca. :when carcinoma affect mucosa or submucosa
withor without lymph node involvement , if we deal with this
bysurgery 10 years survive 90% without recurrent &
symptomfree

(LGC) ⌚ Late stage ca. :carcinoma going beyond submucosa

∞-Staging:

TNM

T TUMOR SIZE

T0 ---- no

T1-----lamina propria (mucosa and submucosa)

T2-----muscularis

T3-----serosa

T4-----beyond serosa to adjacent structure

N lymph node

N0 no regional L.N.

N1 1-6 regional L.N.

N2 7-15 REGIONAL L.n.

N3 >15 regional L.N.

M METASTASIS

M0 NO METASTASIS

M1 POSITIVE (LLBB)

► How gastric carcinoma metastasis??

- locally to (esophagus, pancreas, colon,)
- LN metastasis either by permission or by embolism (Virchow's Ca) to 7th left clavical
- Blood borne metastasis (2L, 2b);
Lungs, liver, bone & brain..
- transplacental metastasis to ovary and form (Krukenberg tumor) from
pancreas, colon & gastric cancers.

▶ How the patient presented to you?? (clinical pictures)

Depend on site of tumor

1. Distal part of stomach : pyloric obstruction
2. Proximal part of stomach : dysphagia & regurgitation
3. Tumor in body of stomach (vague feature) *Three A*

Anemia, asthenia, anorexia, malaise, loss of wt.

Metastatic: to lt. supraclavicular L.N. (virchow's L.N.)
trouser L.N. & thromboembolic phenomena (DVT + ca. stomach = trowseous)

4. Transperitoneal spread to umbilicus (sister joseph nodule) in late stage ca. stomach
5. Pt. might present with ascites

△-Investigation:

- ⊙ OGD = biopsy
- ⊙ Ba. Meal
- ⊙ Abd. U/S (FOR LIVER metastasis, para aortic L.N. metastasis, mass in stomach)
- ⊙ CT or MRI *sur staging*
To do TNM & post-operative

△-Treatment:

Assessment by investigation there are two type

1. Resectable : surgery + adjuvant therapy (chemotherapy & DXT)

Surgery depend on site of tumor

- ⊙ Distal part by distal radical gastrectomy + billroth II
(lesser, greater curvature, 1st duodenal part & gastro jejunostomy)

Proximal part by radical proximal gastrectomy
(remove proximal of 70% stomach greater & lesser curvature, lower part of esophagus & spleen).

- ⊙ Body of stomach by radical total gastrectomy + rox-en-y
Esophago- jejunostomy.

- ⊙ Non resectable : beyond resectable by gastrojejunostomy.

Proximal part by using feeding tube + chemo and radiotherapy.