EPIDEMIOLOGY AND CLINICAL PRESENTATION OF GASTRIC CANCER

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DISCLOSURE OF INTEREST

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OUTLINE

• Epidemiology
• Risk Factors
• Clinical Presentation
EPIDEMIOLOGY
EPIDEMIOLOGY

- Gastric Cancer remains a world-wide problem:
  - 6th more frequent tumor, 5th cause of cancer-death
- Wide geographic variation
- While the incidence of distal GC is decreasing, the incidence of GEJC is increasing
INCIDENCE AND MORTALITY

- Gastric Cancer remains a world-wide problem:
  - 6th more frequent tumor, 5th cause of cancer-death

![Bar chart showing estimated age-standardized incidence and mortality rates (World) in 2018, worldwide, both sexes, all ages]
INCIDENCE AND MORTALITY

More frequent few years ago…

INCIDENCE BY SEX
More frequent in males...

MORTALITY BY SEX
More frequent in males...

GEOGRAPHIC DISTRIBUTION

• Wide geographic variation

GASTRIC CANCER

Estimated age-standardized incidence rates (World) in 2018, stomach, both sexes, all ages

ESOPHAGEAL CANCER

Estimated age-standardized incidence rates (World) in 2018, oesophagus, both sexes, all ages
• The incidence of distal GC is decreasing, while the incidence of GEJC is increasing
TRENDS IN CANCER MORTALITY RATES (US, 1930 TO 2016)

INCIDENCE IN EUROPE AND US
MORTALITY IN EUROPE AND US

Mortality from Stomach cancer
Age-standardised rate (World): Male, all ages

Mortality from Oesophageal cancer
Age-standardised rate (World): Male, all ages
INCIDENCE IN ASIA AND SUDAMERICA

Age Standardised Incidence Rate (World), Male age [0-85+]

[Graph showing incidence rates for different countries and regions in Asia and South America over the years 1990-2003.]

IARC - Globocan 2018
MORTALITY IN ASIA AND SUDAMERICA

Mortality from Stomach cancer
Age-standardised rate (World): Male, all ages

Mortality from Oesophageal cancer
Age-standardised rate (World): Male, all ages
GASTRIC WITHIN GI CANCERS

• 4th in incidence, 4th in mortality,
  • After colorectal cancer, pancreatic cancer, and liver & intrahepatic bile duct cancers

RISK FACTORS
The majority of them have an important role on generating the inflammatory underlying condition:

For Gastric Cancer (GC)
- Atrophic chronic gastritis, pernicious anemia, adenomatous polyps
- Genetic Factors
- Environmental Factors: smoking, H Pylori, ↓ fruit and vegetables, ↑ salt and smoked, poorly preserved food
  - H Pylori accounts for 90% of non-cardia GC (since 1994, declared as a Class I carcinogenic factor by the WHO)

For Gastro-esophageal Junction Cancer (GEJC)
- Environmental Factors: Obesity, GEJ reflux, diet (↓ fiber, ↑ fat)
CLINICAL PRESENTATION
• Between 40–50% of patients present with metastatic disease at diagnosis
  • Although > 80% of the patients will develop metastases

• Only 25% of Europeans with gastric cancer are long-term survivors

• Patient variability
  • Inter-patients (histology, molecular subtypes)
  • Intra-patient (heterogeneity)
CLINICAL PRESENTATION

• Symptoms
  • Malnutrition, weigh loss
  • Dysphagia, dyspepsia, vomits (depending on the tumor location)
  • Asthenia
  • Pain
  • Depending on the tumor location and the metastatic sites

• Analytical findings
  • Anemia
    • Tumor bleeding
  • Malnutrition
  • Other analytical errors
    • Depending on comorbidities / metastatic location
**CLINICAL PRESENTATION**

Patient fragility

- Age (≈ 65y)
- Symptoms
- Signs
- Comorbidities

Aggressive disease

- 40-50% of patients present metastases at diagnosis
- 50% of patients will recur after surgery

- Short progression free survival
  - 5-7 months for the 1st line
  - 1.5-3 months for the 2nd line
CONCLUSIONS 1

• Gastric (and gastro-esophageal cancer) remains a world-wide problem
  • 5-6<sup>th</sup> more frequent tumor, 3-5<sup>th</sup> cause of cancer-death
  • More frequent in men (2:1)

• Wide geographic variation
  • Highest incidence in East Asia, Central and Eastern Europe and South America
  • Lowest incidence in North America, Northern Europe and Africa
  • Differences depending on the risk factors
    • Dietary patterns, food storage and availability of fresh products, as well as H Pylori infection
CONCLUSIONS 2

• The incidence of distal GC is decreasing, but the incidence of GEJC is increasing
  • Changes in life style

• GC patients are really fragile patients
  • Because of the location of the tumor, which makes this tumor a very symptomatic one
  • Because of its inherent aggressiveness
THANK YOU FOR YOUR ATTENTION