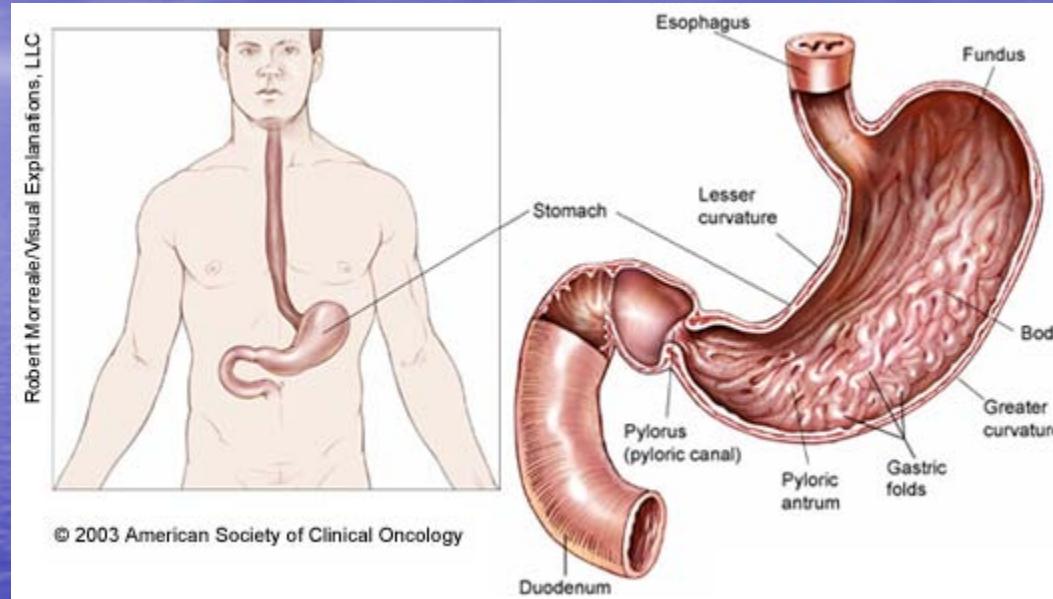


Gastric Cancer 胃癌 2011



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The Situation 现状

In 2009, an estimated 21,500 adults (13,190 men and 8,310 women) in the United States will be diagnosed with stomach cancer. It is estimated that 10,880 deaths (6,450 men and 4,430 women) from this disease will occur this year. Most people diagnosed with stomach cancer are in their 60s and 70s.

The five-year relative survival rate (percentage of patients who survive at least five years after the cancer is detected, excluding those who die from other diseases) of patients with stomach cancer is about **24%**.

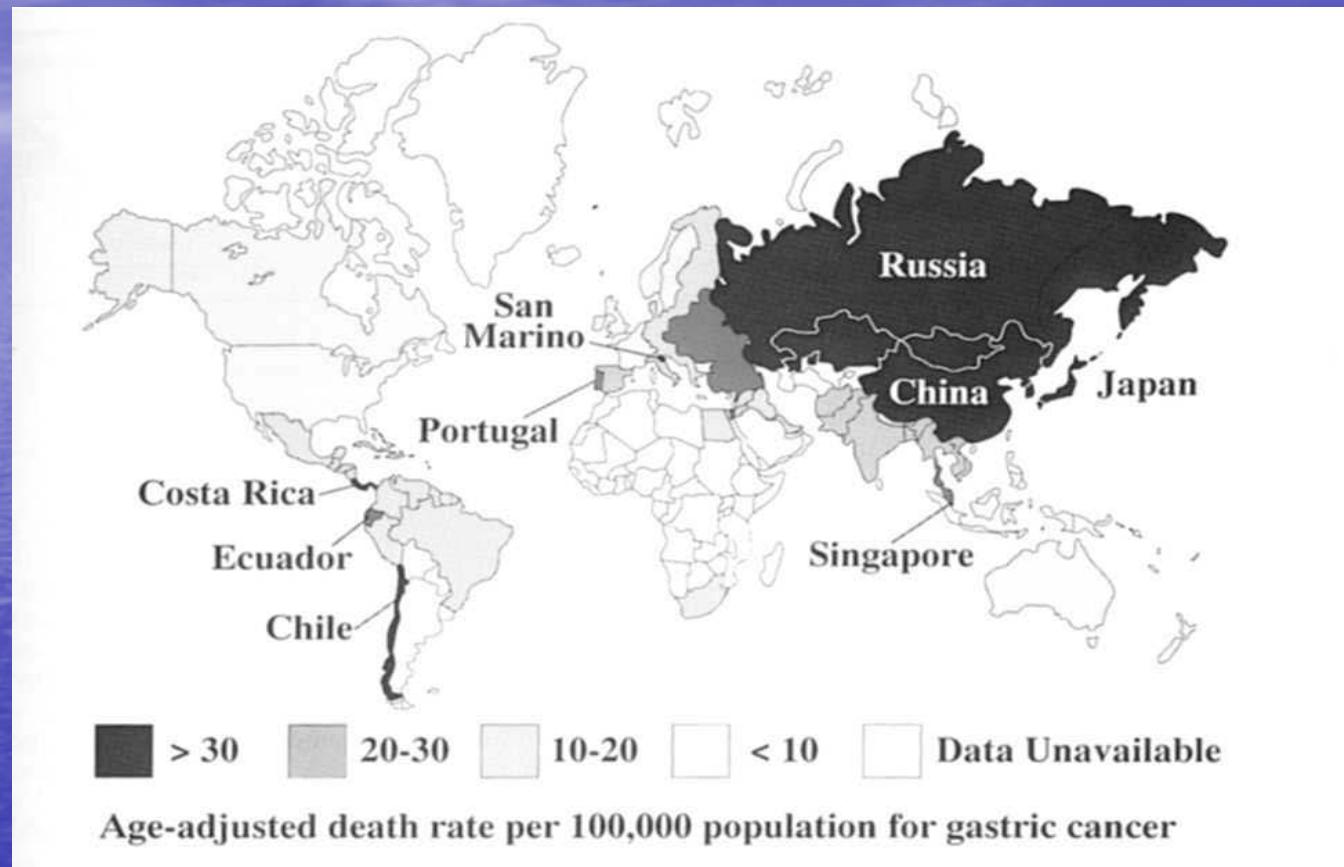
If stomach cancer is found before it has spread, the five-year relative survival rate is about **61%**.

2009年，在美国估计有21,500成年人（13,190男性和8,310名女性）将被诊断为胃癌。据估计，这一年有10,880人将死于这种疾病（6,450男性和4,430名女性）。大多数确诊为胃癌的人年龄是60多岁和70多岁。

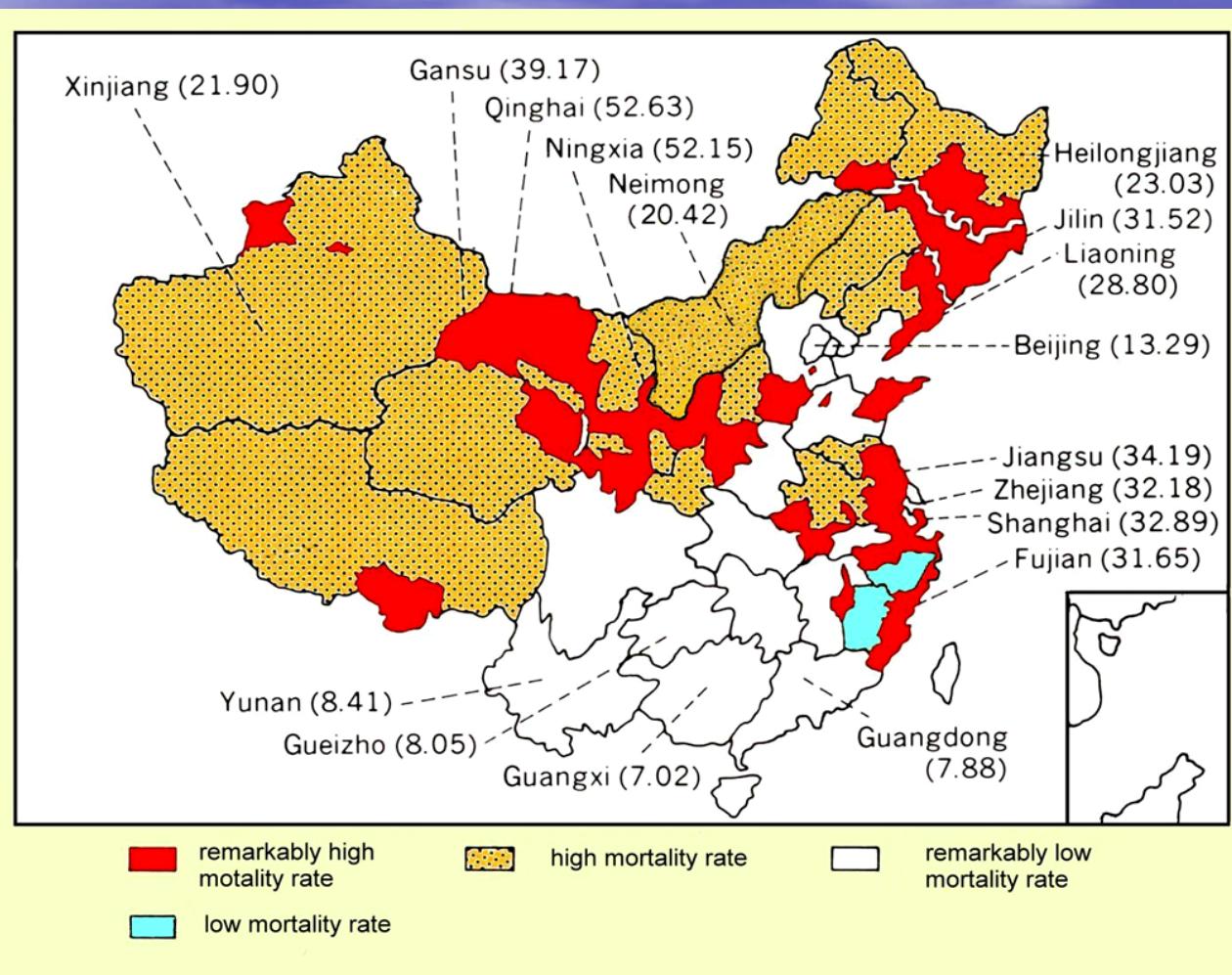
胃癌患者的五年相对存活率（病人癌症发现之后生存五年以上的百分比，不包括那些死于其他疾病的人）约为24%。

如果胃癌发现时还没扩散，五年相对存活率约为61%。

Gastric Cancer: Asian Countries 胃癌：亚洲国家

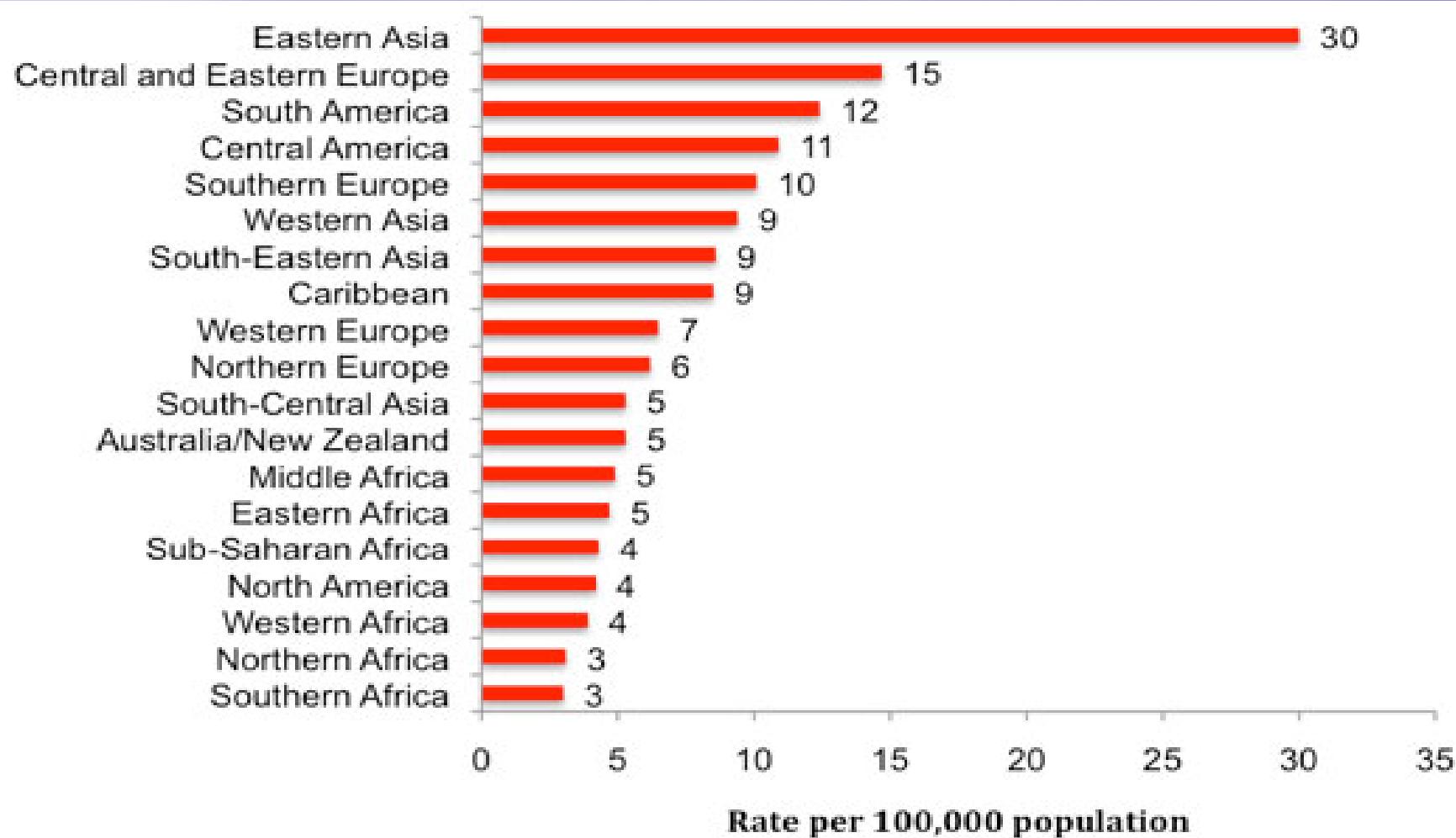


Japan, China, Russia, Korea, Costa Rica Chile Brazil



Gastric Cancer: Regions

胃癌：地区



Causes and Risk 病因及风险

- Age. over age 55.
- Gender. Men have twice the risk
- Family history. a first-degree relative
- Genetic mutations
 - Hereditary diffuse gastric cancer,
 - hereditary non-polyposis colorectal cancer (HNPCC or Lynch syndrome) and
 - familial adenomatous polyposis (FAP)
- Race. Black people and Asians
- Diet. Eating foods preserved by drying, smoking, salting, or pickling.
- Bacteria. *Helicobacter pylori*
- Previous surgery or health conditions. pernicious
- Occupational exposure. Exposure to certain dusts and fumes may increase the risk of developing stomach cancer.
- Tobacco and alcohol
- Obesity.

Causes and Risk 病因及风险

- 年龄: 55岁以上。
性别: 男性有双倍的风险
家族史: 直系亲属
基因突变
 - 遗传性弥漫性胃癌,
 - 遗传性非息肉性大肠癌 (HNPCC或Lynch综合症) 和
 - 家族 (FAP) 的腺瘤性息肉病
种族: 黑人和亚洲人
饮食: 吃熏制和腌制的食品。
细菌: 幽门螺旋杆菌
以前的手术或健康状况。
职业暴露: 接触某些粉尘和烟雾可能会增加患胃癌的风险。
烟草和酒精
肥胖。

Genetic factors 遗传因素

- The majority of gastric tumor are sporadic in nature
- 大部分胃癌肿瘤-
- Rare inherited gastric cancer predisposition traits
- 罕见的遗传性胃癌-
 - p53 (Li-Fraumeni syndrome)
 - E-cadherin (CDH1) alterations

Clinical Manifestation

临床表现

Signs and Symptoms 症状

Early Gastric Cancer 早期胃癌

Asymptomatic or silent 无症状	80%
Peptic ulcer symptoms 消化性溃疡症状	10%
Nausea or vomiting 恶心或呕吐	8%
Anorexia 厌食症	8%
Early satiety 早饱	5%
Abdominal pain 腹痛	2%
Gastrointestinal blood loss 胃肠道出血	<2%
Weight loss 体重减轻	<2%
Dysphagia 吞咽困难	<1%

Signs and Symptoms 症状

Weight loss 体重减轻 60%

Abdominal pain 腹痛 50%

Nausea or vomiting 恶心或呕吐 30%

Anorexia 厌食症 30%

Dysphagia 吞咽困难 25%

Gastrointestinal blood loss 胃肠道出血 20%

Early satiety 早饱 20%

Peptic ulcer symptoms 消化性溃疡症状 20%

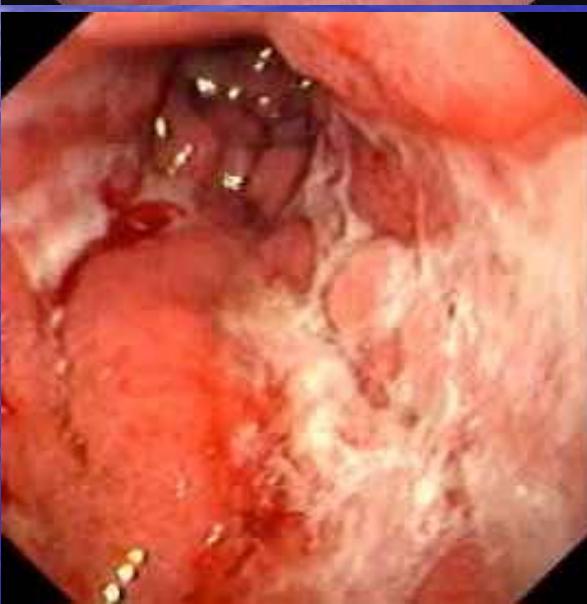
Abdominal mass or fullness 腹部包块或饱胀感 5%

Asymptomatic or silent 无症状 <5%

Diagnosis 诊断

- Endoscopy(EGD) 胃镜
- Endoscopic ultrasound 胃镜超声
- X-ray:Barium swallow 钡餐透视
- Computed tomography (CT) scan 电脑断层扫描
- Positron emission tomography(PET) 正子发射断层扫描
- H Pylori 幽门螺旋杆菌
- Biopsy 活检

Gastric Cancer: Endoscopy 胃镜



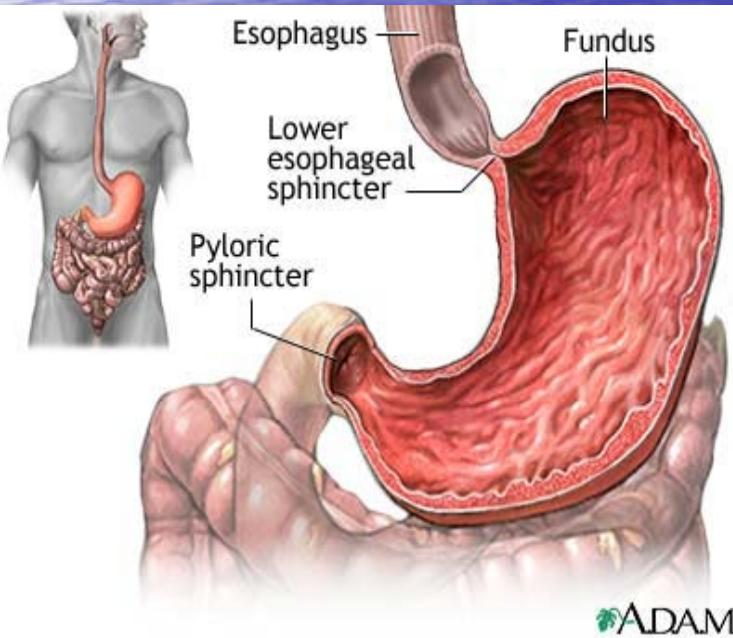
Endoscopic Mucosal Resection

胃镜下黏膜切除术

- Gastric cancer lesion confined to mucosa layer
胃癌病变局限于黏膜层
- Endoscopic ultrasound (EUS) is helpful in staging GC
胃镜超声 (EUS) 对胃癌分期有帮助

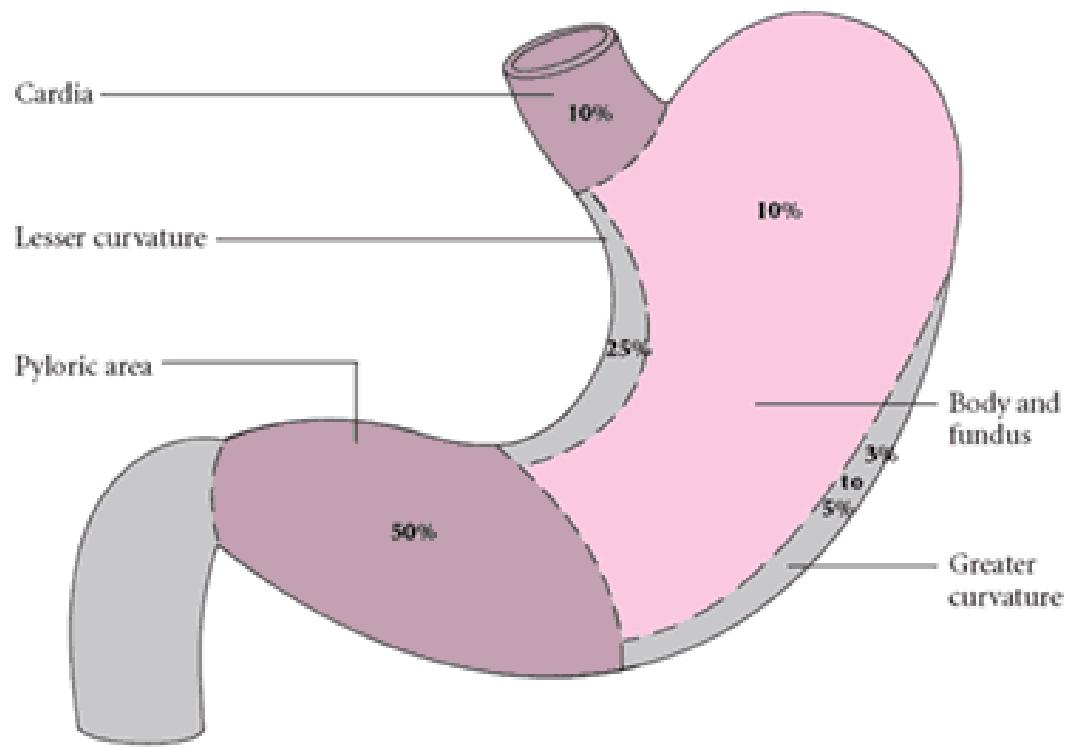


Stomach Cancer: Sites 部位



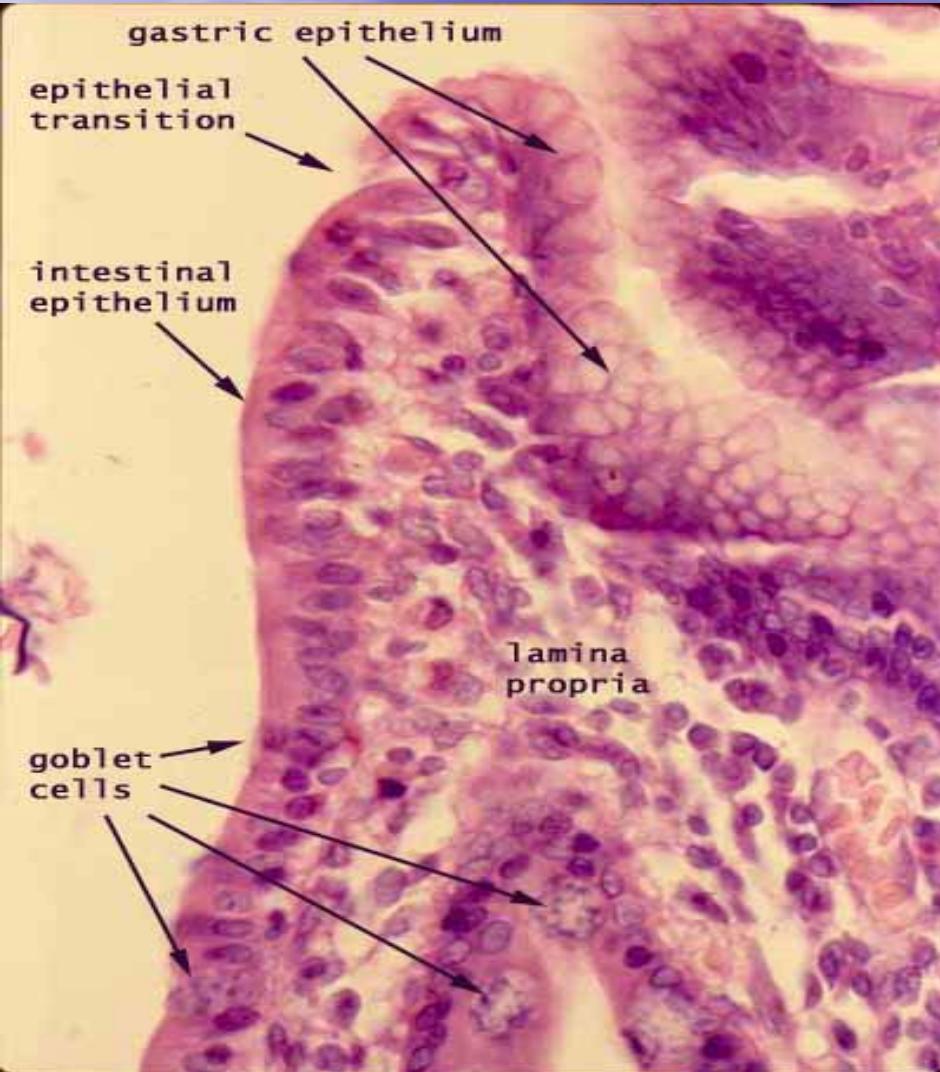
SITES OF GASTRIC CANCER

The most common site of gastric cancer is the pyloric area, accounting for about 50% of cases. The next most common area is the lesser curvature of the stomach, accounting for about 25% of cases.

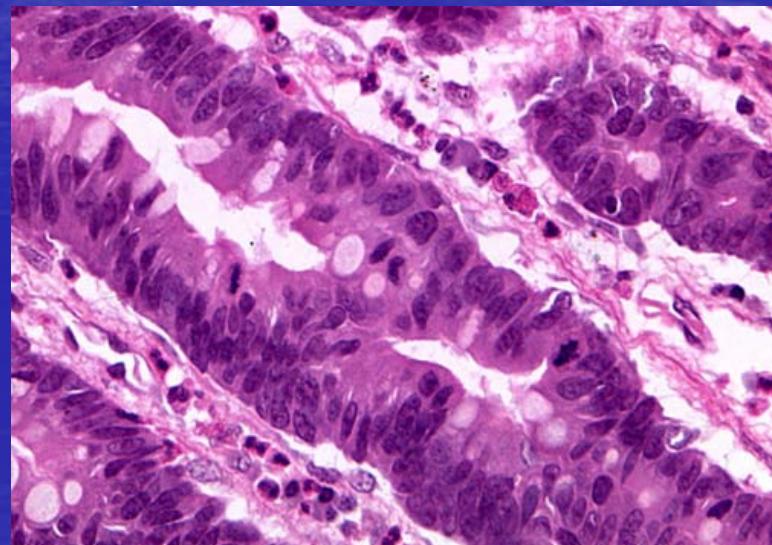


Pathology and Biopsy

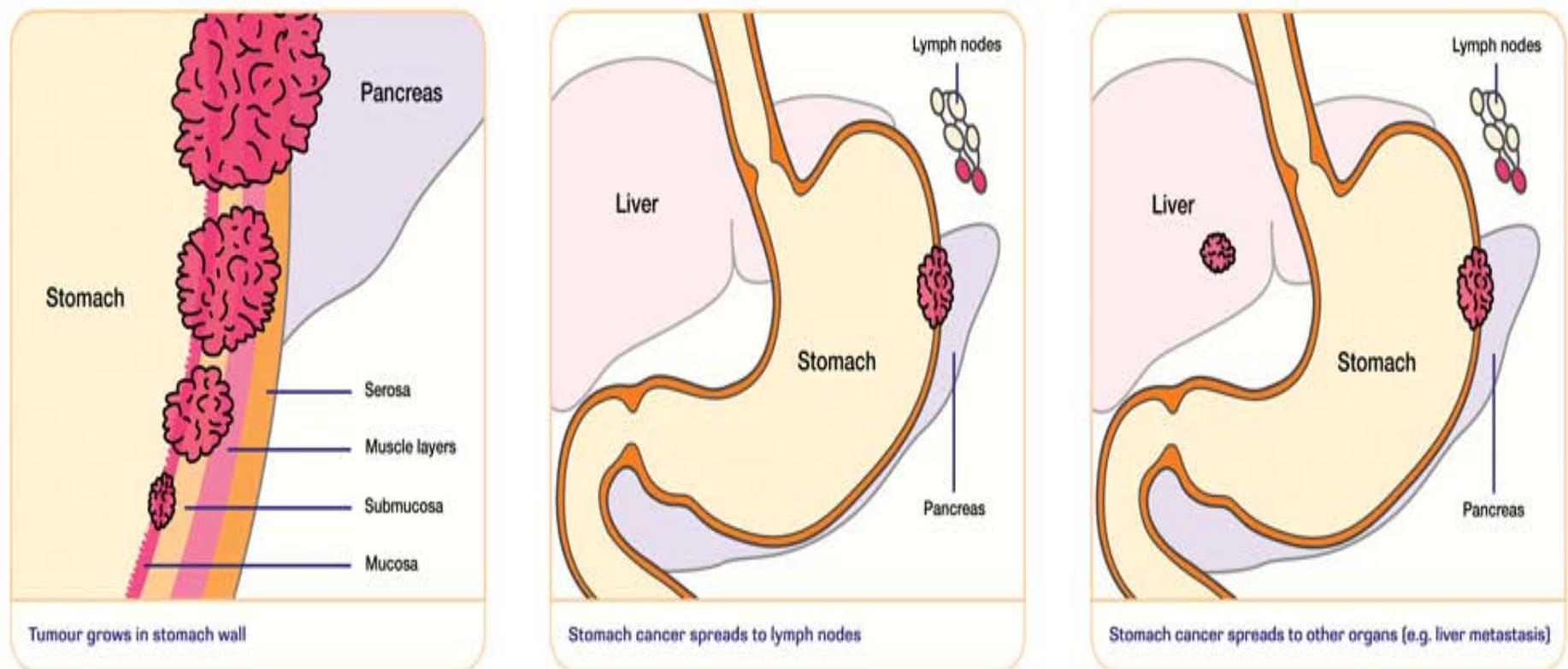
病理和活检



Most (85%) cases of
gastric cancer are
adenocarcinomas
大部分胃癌(85%)是腺癌



Stages TNM分期



TNM Classification 分类

0	Tis	N ₀	M ₀	III A	T ₂	N ₂	M ₀
I A	T ₁	N ₀	M ₀		T ₃	N ₁	M ₀
I B	T ₁	N ₁	M ₀		T ₄	N ₀	M ₀
	T ₂	N ₀	M ₀	III B	T ₃	N ₂	M ₀
II	T ₁	N ₂	M ₀	IV	T ₄	N ₂	M ₀
	T ₂	N ₁	M ₀		T _{1~3}	N ₃	M ₀
	T ₃	N ₀	M ₀		any T	any N	M ₁

Gastric Cancer Surgery 胃癌手术

- Very Early Stages 非常早期: T1,
Surgery alone 单纯手术 or EMR
- Any T2 or N +: Pre-op Chemotherapy
先手术再化疗
- Post-op 后手术: for any patients with
T2 or above T2 或以上, chemotherapy
or chemoradiation
化疗或放化疗

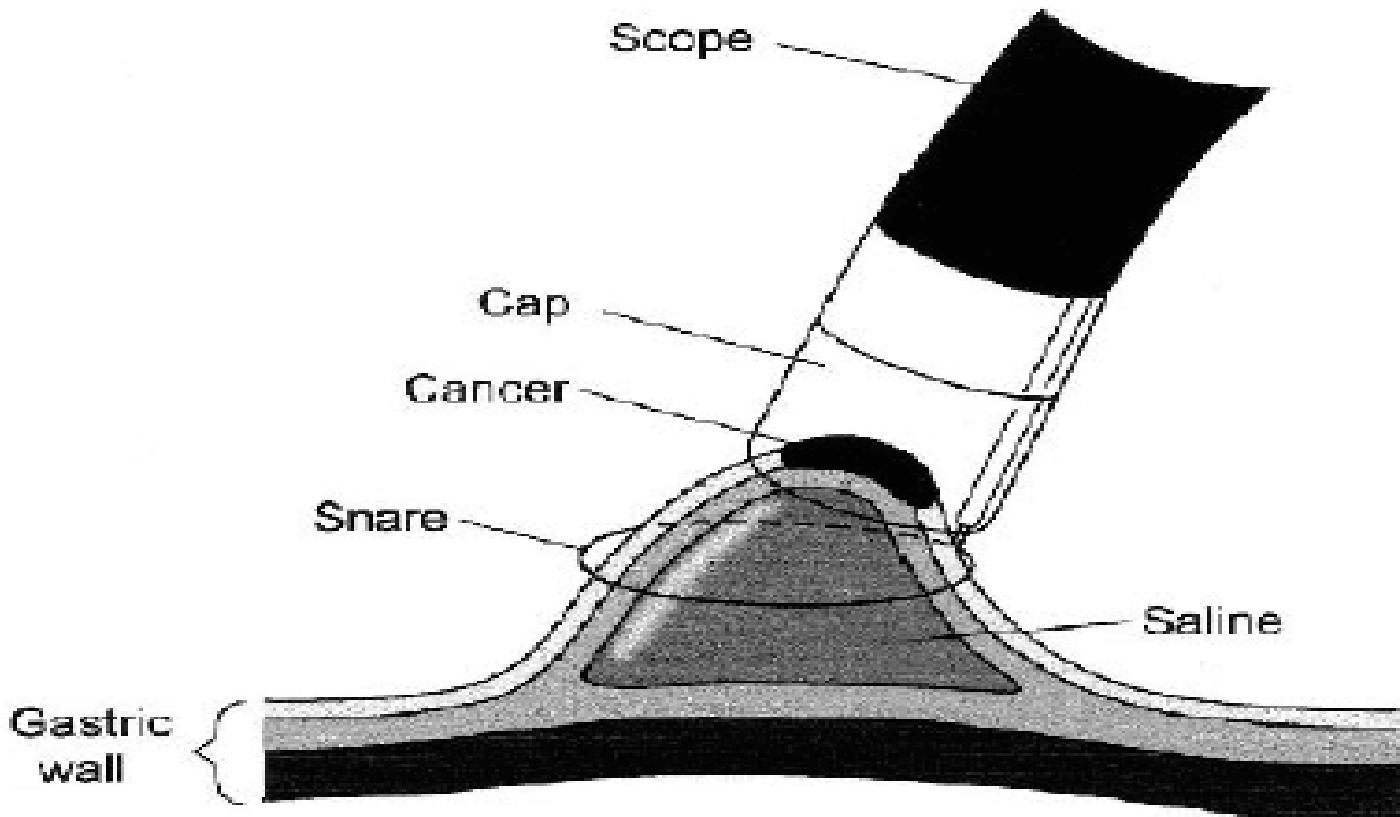


Endoscopic Mucosal Resection

胃鏡下黏膜切除术

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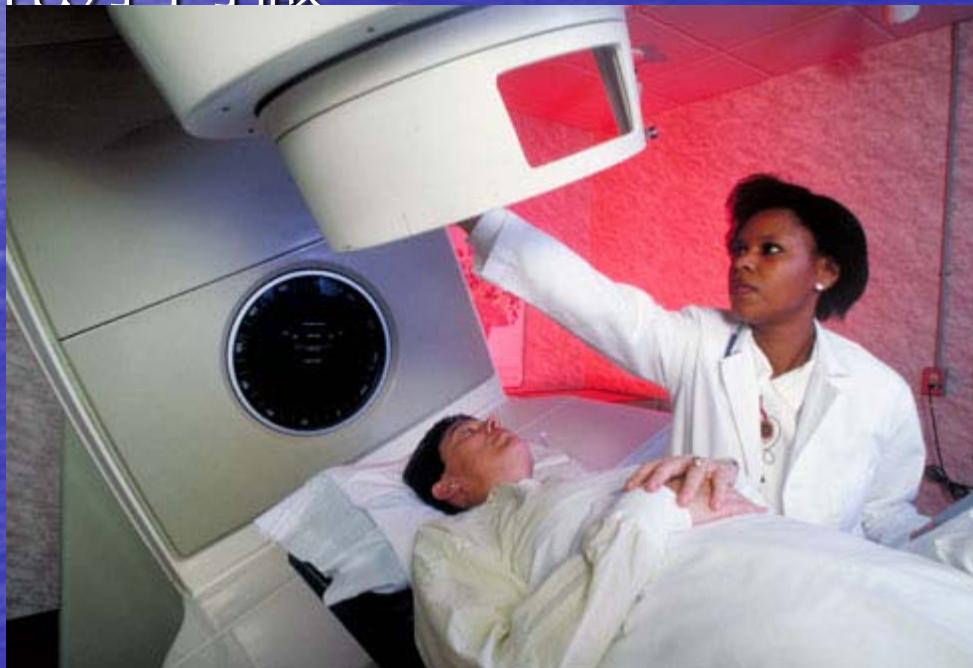


Source: Curr Opin Gastroenterol © 2003 Lippincott Williams & Wilkins

Gastric Cancer Radiotherapy

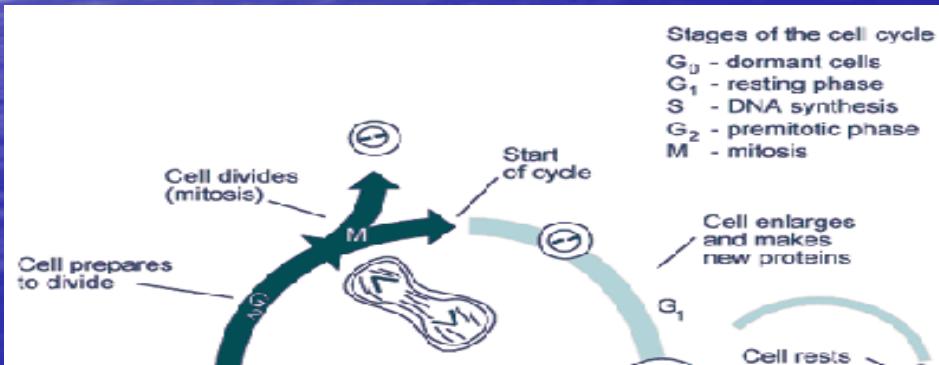
胃癌放射治疗

- Dose 剂量: 45-50cGy, 1.8cGy/day, 25 days
- Often given together with chemotherapy
常常与化疗同做

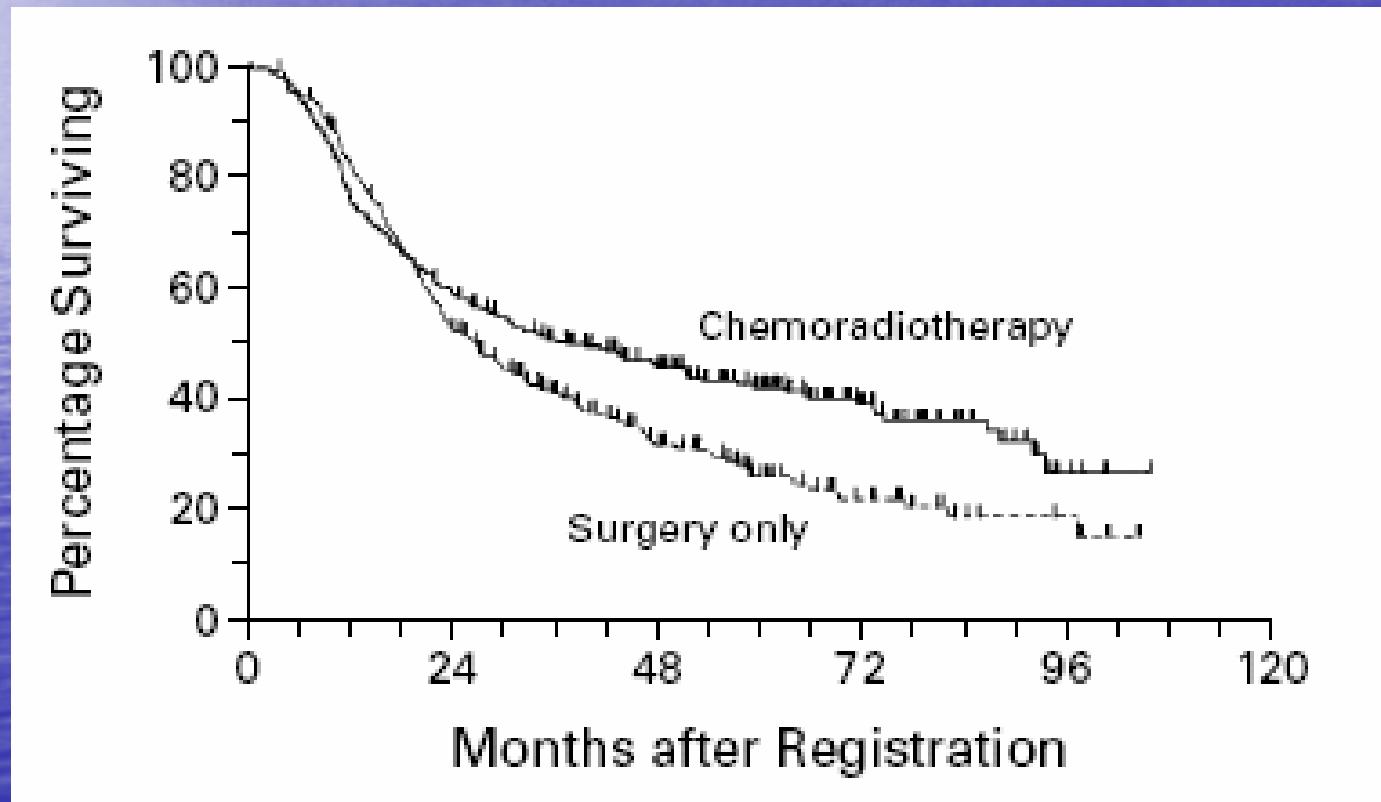


Chemotherapy 化疗

- Adjuvant chemotherapy: for any T2 or above or N+ patients: increase 5 years survival rates
- 辅助化疗: 对于T2或以上或N+患者: 提高5年生存率
- Combination chemotherapy are recommended
- 建议综合化疗
 - DCF: Docetaxel, Cisplatin, 5FU
 - ECF: Epirubicin, Cisplatin, 5FU

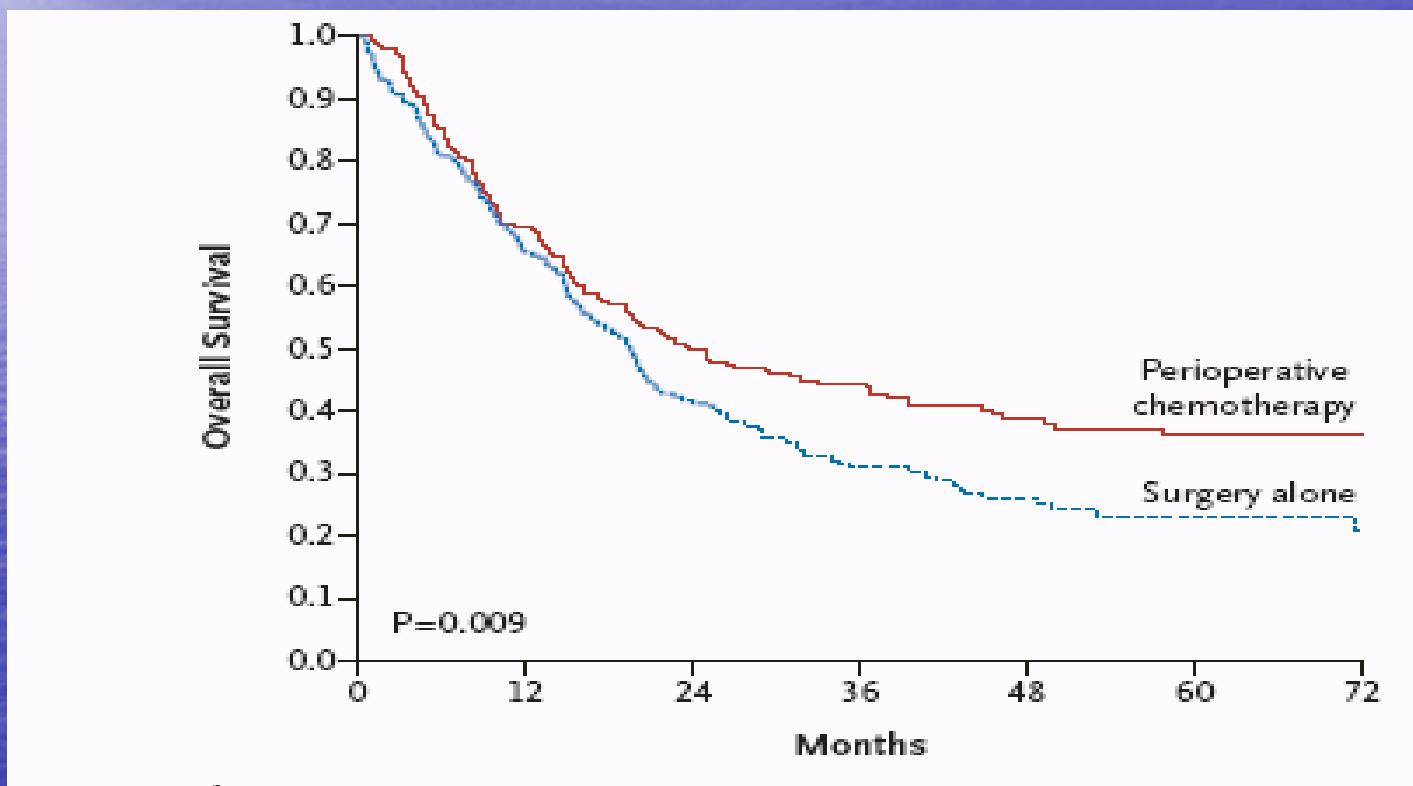


Gastric Cancer: Post-op CRT



Gastric Cancer: Chemotherapy

胃癌：化疗



Prevention 预防



- Eradication of *H. Pylori* infection in those high risk
 - family history of gastric cancer
 - chronic gastritis with apparent abnormality (atrophy, IM)
 - post early gastric cancer resection
 - gastric ulcer
- Management of dietary risk factor
 - intake adequate amount of fruits, vegetables
 - minimize their intake of salty/smoked foods

Prevention预防

- 高风险者要根除幽门螺旋杆菌感染
 胃癌家族史
 慢性胃炎伴明显异常（萎缩，IM）
 早期胃癌切除后
 胃溃疡
 膳食危险因素的管理
 摄入足够量的水果，蔬菜
 尽量减少腌和熏制的食品的摄入量

EPIC Study EJC21/10/2010

- For gastric cancer risk was inversely associated with high plasma vitamin C , some carotenoids, retinol and α -tocopherol , high intakes of cereal fibre and high adhesion to Mediterranean diet;
- 胃癌的风险与下列因素成反比: 高血浆维生素C, 某些胡萝卜素, 相关的维生素A和 α -维生素E, 高谷物纤维, 高地中海饮食摄入量;
- while red and processed meat was associated with an increased risk.
- 而红肉和加工肉类会增加风险。