



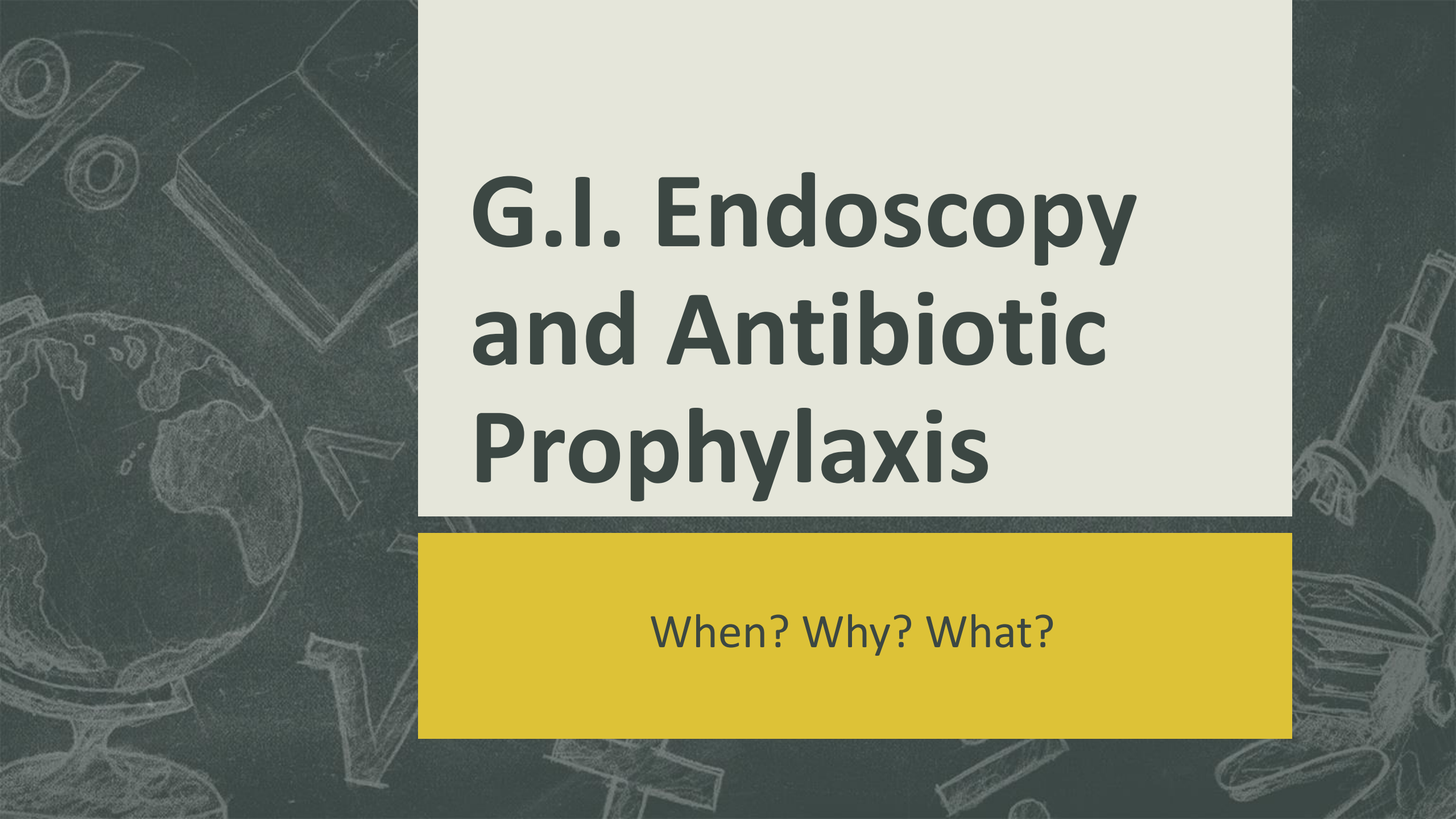
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Disclosure: I work for the Curators of the University of Missouri and have no conflicts of interest.

The background features a dark, textured surface with faint, light-colored illustrations of various scientific and medical concepts. On the left, there is a globe showing continents. Above it, there are circular diagrams and a book. On the right, there is a detailed drawing of a microscope. The overall theme is scientific and medical.

# **G.I. Endoscopy and Antibiotic Prophylaxis**

When? Why? What?

## As of 2004, every year in the US...

- 14.2 million colonoscopies,
- 2.8 million flexible sigmoidoscopies,
- As many EGD's,
- 25 cases of Infectious endocarditis-temporal association.

Seeff LC et al., How many endoscopies are performed for colorectal cancer screening? Results from CDC's survey of endoscopic capacity. *Gastroenterology* 2004;127:1670-7.

## Procedures with highest rate of bacteremia...

1. Esophageal dilatation 12% - 22% in 3 prospective trials.
2. Sclerotherapy of varices mean of 14.6%
3. Variceal ligation mean of 8.8%
4. ERCP without obstruction of the CBD 6.3%
5. ERCP with obstruction of CBD 18%
6. EGD and colonoscopy mean of 4.4%

## Patient's daily activities...

1. Brushing and flossing 20% - 68%
2. Use of a toothpick 20% - 40%
3. Chewing food 7% - 51%

## AHA Guidelines (2007)

Prophylactic antibiotics **solely to prevent IE** was **no longer** recommended for patients undergoing GI Endoscopy.

## AHA – Highest risk for IE included in the following patients:

1. Prosthetic cardiac valves.
2. History of IE.
3. Cardiac transplant patients with valvulopathy.
4. Congenital heart disease (CHD) with unrepaired cyanotic defects and repaired CHD with prosthetic devices for 6 months.

RECOMMENDATION – Antibiotic prophylaxis for GI procedures if there's active enterococci infection of the GI tract.

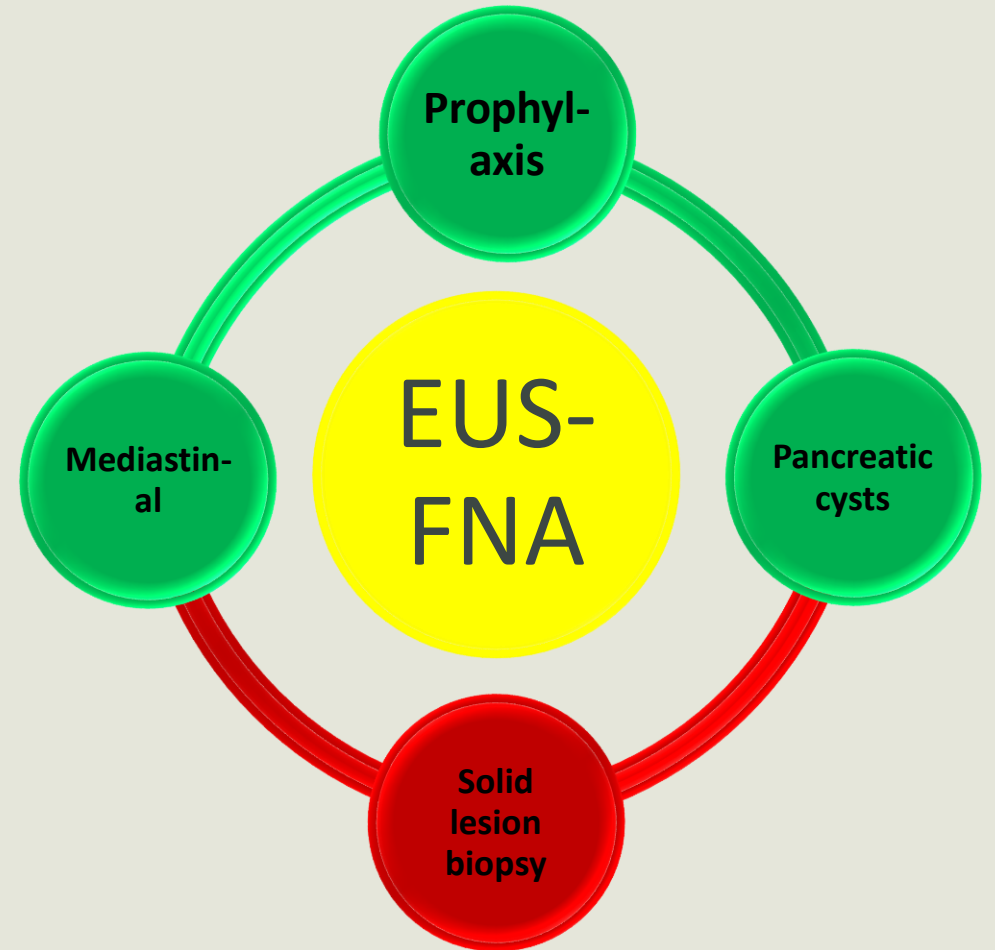
## ERCPS..

- ERCP **without** cholangitis or CBD obstruction –  
**no antibiotics**
- ERCP **with** cholangitis and/or CBD obstruction –  
**antibiotics**



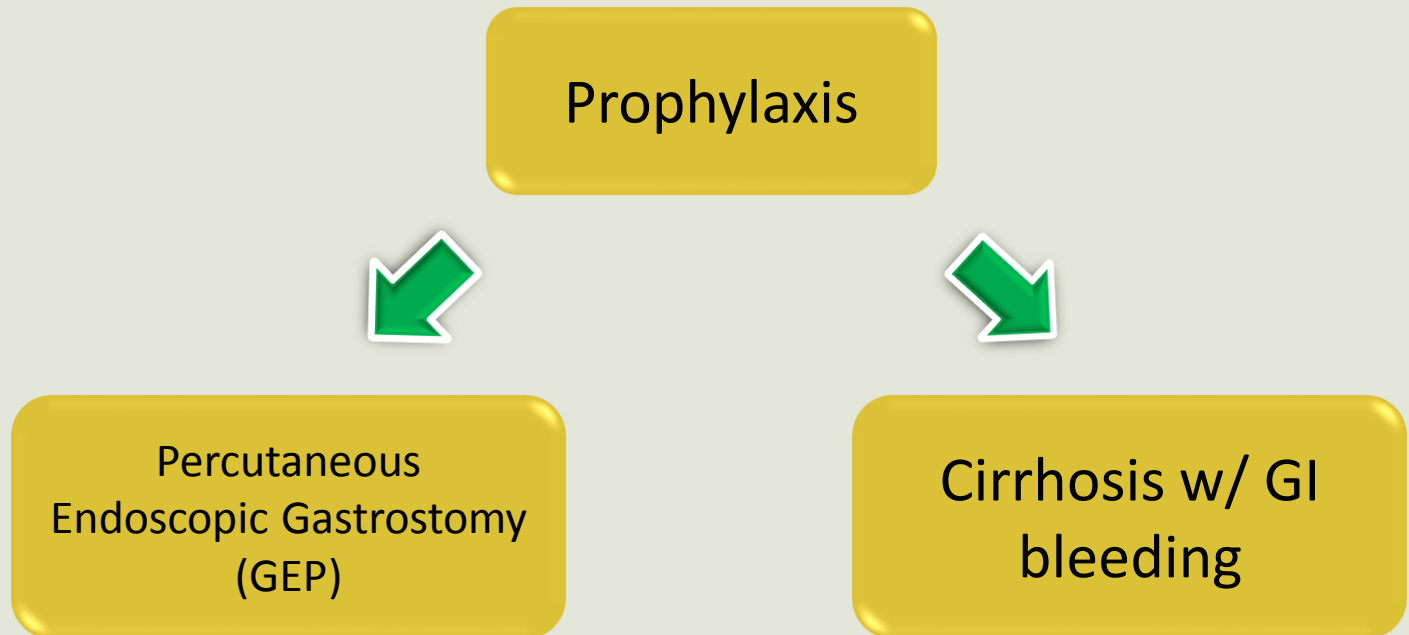
## EUS-FNAs...

- EUS-FNA for solid lesion biopsy – **no prophylaxis**
- EUS-FNA for mediastinal or pancreatic cysts – **suggested prophylaxis**



## Situations in which prophylaxis is recommended:

1. Percutaneous endoscopic gastrostomy (PEG) tubes
2. Cirrhosis with GI bleeding



## Maybe?

1. Neutropenia (<500 cells/uL absolute neutrophil count) if undergoing GI procedure with high risk for bacteremia.
2. Immunocompromised status with normal neutrophil count – judgement call.
3. Peritoneal dialysis – prophylaxis may prevent peritonitis.

## NEVER Recommended...

1. Synthetic vascular grafts.
2. CAD stents.
3. Pacemakers or defibrillators.
4. Vena Cava filters or peripheral vascular stents.
5. Orthopedic hardware – **no evidence of benefit for prophylactic antibiotics.**