# General Pathology 13 February 2, Wednesday, 2005 Masashi Fukayama

#### Chronic inflammation: remodeling, inflammation with metaplasia

|              | interstitial pneumonia   | chronic gastritis     | chronic hepatitis |
|--------------|--------------------------|-----------------------|-------------------|
| cause        | unknown                  | Helicobacter pylori   | hepatitis B virus |
|              |                          | chronic inflammation  | hepatitis C virus |
| site feature | subpleura, inferior lobe | whole stomach         | whole liver       |
|              |                          | type A (fundic gland  |                   |
|              |                          | area)                 |                   |
| final form   | honeycomb lung           | glandular atrophy     | pseudolobule      |
|              | pulmonary fibrosis       | intestinal metaplasia |                   |
|              |                          | of the gastric mucosa |                   |
| metaplasia   | squamous metaplasia      | intestinal metaplasia | pseudo bile duct  |
|              | glandular metaplasia     |                       |                   |
| complication | lung cancer              | gastric carcinoma     | hepatocellular    |
|              |                          | gastric MALToma       | carcinoma         |

#### Chronic inflammation, infection and carcinogenesis

A. Chronic gastritis, intestinal metaplasia of the gastric mucosa, Helicobacter pylori infection

gastric carcinoma

MALT (mucosa associated lymphoid tissue) tumor – involution resulted by animal experiments and bacteria elimination

### B. Others

burn scar and squamous cell carcinoma

Sjogren's syndrome, chronic thyroiditis and lymphoma

chronic empyema and lymphoma (EBV)

pulmonary fibrosis and lung cancer: heavy smoker, increased frequency of squamous cell carcinoma at the peripheral lung

ulcerative colitis and carcinoma of the colon and rectum

cancer of anal fistula

## C. Human tumor virus (oncogenic virus)

virus-associated cancers account for 15% of the world total carcinogenesis persistent infection: long latency period before the development of cancer, only a

limited number of carriers will develop cancer

- 1) papilloma virus (HPV)
- 2) Epstein-Barr virus
- 3) HTLV1 (Human T-lymphotropic virus type I)
- 4) hepatitis virus (hepatitis B virus, hepatitis C virus )
- 5) Kaposi sarcoma virus