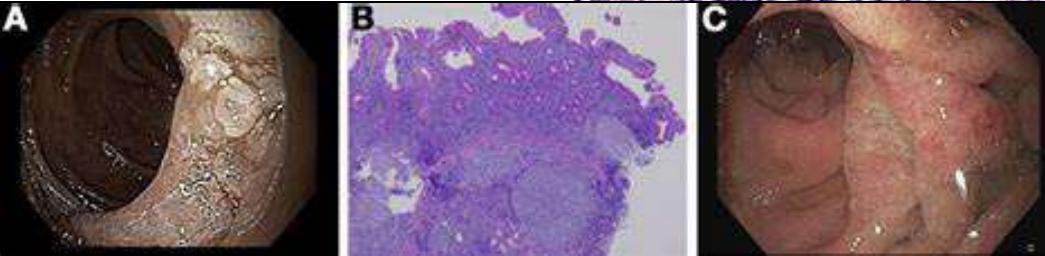
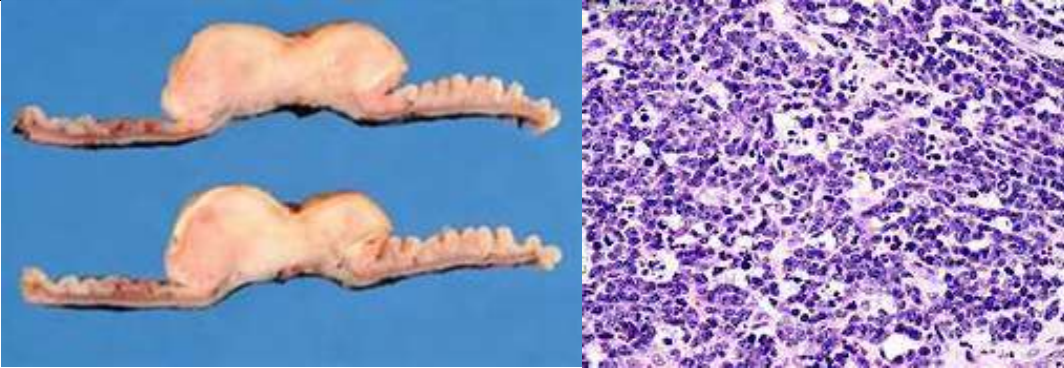


XVII. Diseases of the Digestive System

Sarcoma III-4,2.561



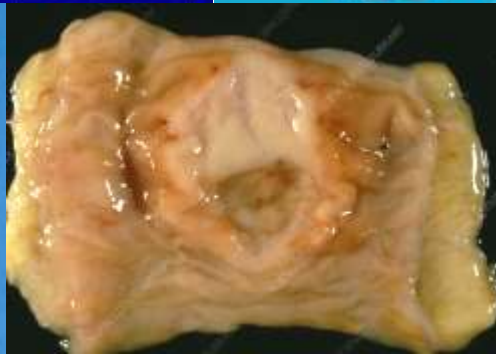
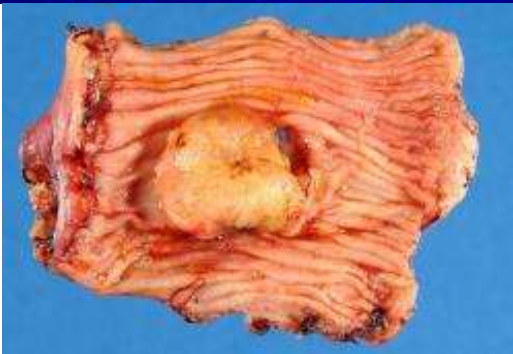
<i>Sarcoma</i>	• A piece of small intestine:		
	<i>Shows:</i>	• Matting together of loops • Multiple tumours	
	<i>The tumour:</i>	• Of numerous masses • Variable in size • Bulky (few masses) and small (other masses) • Homogeneous cut-surface • Opaque greyish-white in colour • Fleshy in appearance • Soft in consistence • Shows areas of haemorrhage and necrosis	

N.B.:

- *Histologically, it proved to be a Lymphoma.*

Histologic types:

Tumor type	Cell of origin	Small intestine malignancy	nt
adenocarcinoma	Epithelial cell	35 – 50%	Duodenum
carcinoid	Enterochromaffin cell	20 – 40%	Ileum
lymphoma	lymphocyte	10 – 15%	Ileum
GIST (gastrointestinal stromal tumors)	? Interstitial cell of Cajal	10 – 15%	-



Malignant tumour of small intestine are rare in general

1. Carcinoma:

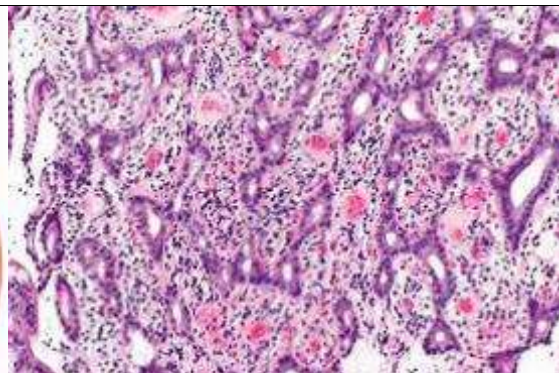
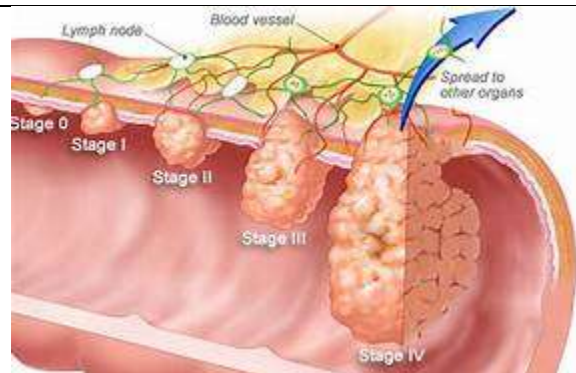
- Usually **annular (encircles the gut)**; occasionally polypoid.
- Occurs chiefly at proximal part; is usually **adenocarcinomatous**.
- Is very rare; late to send metastases.

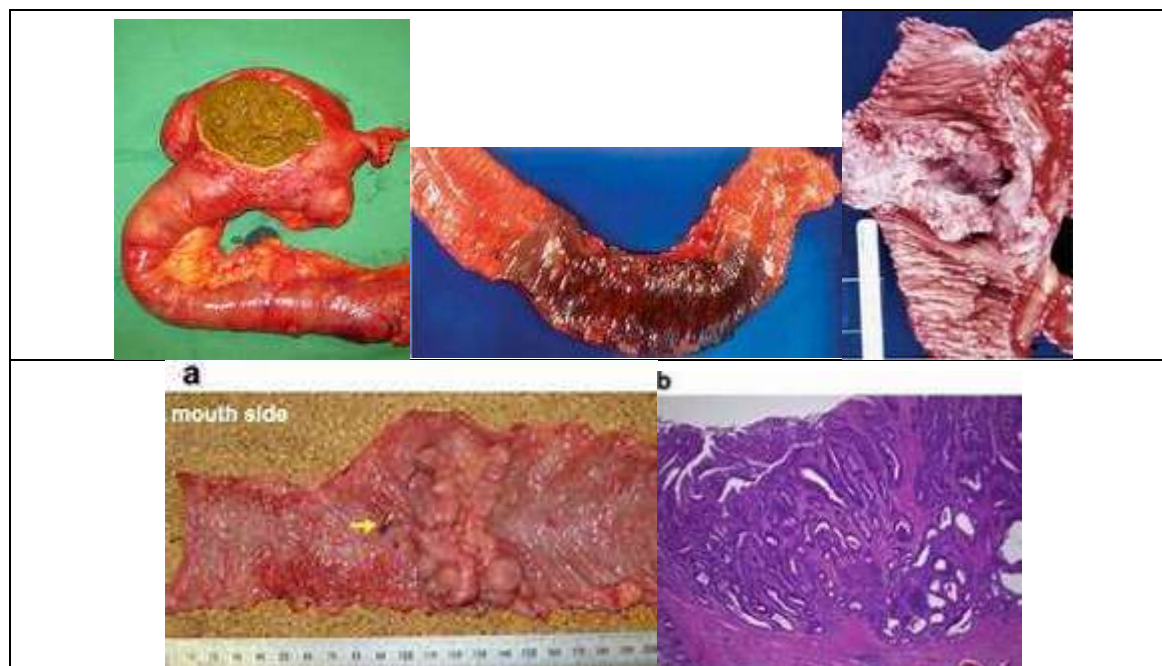
2. Sarcoma:

- Of mesenchymal origin; bulky masses; soft, haemorrhagic and necrotic.

3. Lymphoma:

- **Rather common** (relatively) especially at ileum.
- *May be*
 - **lymphoma (MALToma) (at one segment then more segments) or**
 - **High grade lymphoma (at many segments).**
- May be primary (arising in the lymphoid tissue of ileum-wall):
 - Commoner in male children.

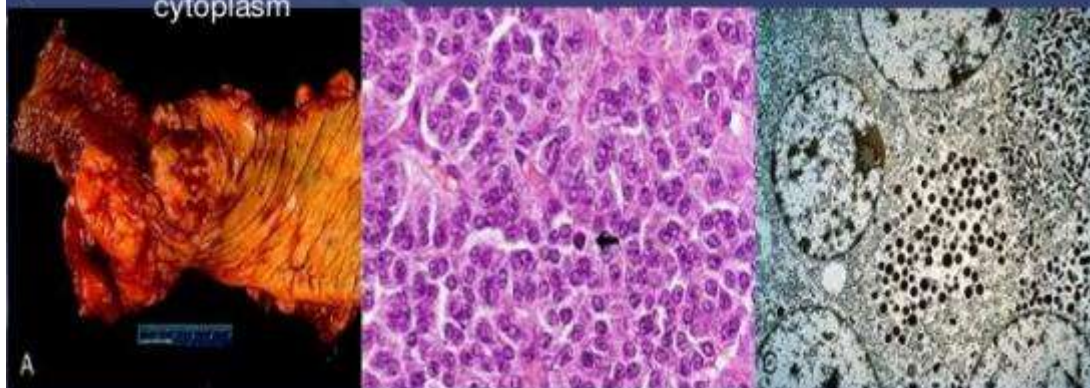




Carcinoid Tumors

Pathological Lesion

- ❖ **Round submucosal** elevations that are bright **yellow or yellow-gray**, may be deeply infiltrative and penetrate muscle to the **serosa**.
- ❖ Gastric and ileal carcinoids are **frequently multiple**.
- ❖ Tumor cells arranged in **trabecular, insular, glandular or undifferentiated** patterns are monotonously similar to each other with regular round nuclei
- ❖ Ultrastructural features: **neurosecretory electron dense bodies** in the cytoplasm



4. Carcinoid:

- *Whitish-grey and soft. –*
- *Extends at long axis of gut into the wall then into the mesenteric lymph nodes.*
- *Metastasizes early into liver, bone marrow and lungs.*
- *May be secondary (as part of a generalized lymphomatosis) :*
- *Multiple masses (along all small intestine) which may extend deeply till even perforation,*
- *Is an argentaffinoma which may appear in the proximal part of*

- *small intestine (25%),*
- *stomach (5%),*
- *rectum (5%), or*
- *colon, pancreas, biliary tree and bronchi (5%);*
- *these sites are the extra-appendicular sites.*
- *Single or multiple, small (4-5 cm.) submucosal greyish-yellow rounded firm masses (or a large one) Liable to metastasize to liver, lungs, bones and regional lymph nodes; hence, **the carcinoid syndrome.***

Due to excess production of the humoral agent 5-HT (serotonin) →

- *Cyanosis,*
- *Flushing of skin,*
- *Diarrhoea,*
- *Asthmatic-like attacks,*
- *Cardiac symptoms,*
- *Oedema and*
- *Wasting.*

This syndrome is not noticed in the only-locally-invasive (non-metastasizing) appendicular carcinoid (60%).

