Bilharzial Polypi III-4, 3. 451

A piece of large intestine:		***Mucosa:***	**Is congested** **Thickened**		
			Shows:	Sandy patches	
		Polypi:	• ***Multiple***		
			• ***Variable in size*** • ***Variable in shape*** • ***Pedunculated (some)*** • ***Sessile (some)*** • ***Branching (few)*** • ***Granular surface*** • ***Small (in length or diameter)*** • ***Moderate in size (some)***		
	Sandy patches:		• ***Irregularly-distributed*** • ***Dirty greyish-yellowish*** • ***Granular surface***		

N.B.:

Bilharzial polypi are inflammatory in nature; and, they are ***differentiated from neoplastic papillomata by:***

1. ***Granularity of the surface.***
2. ***Associated Bilharzial lesions.***
3. ***Microscopic*** examination.

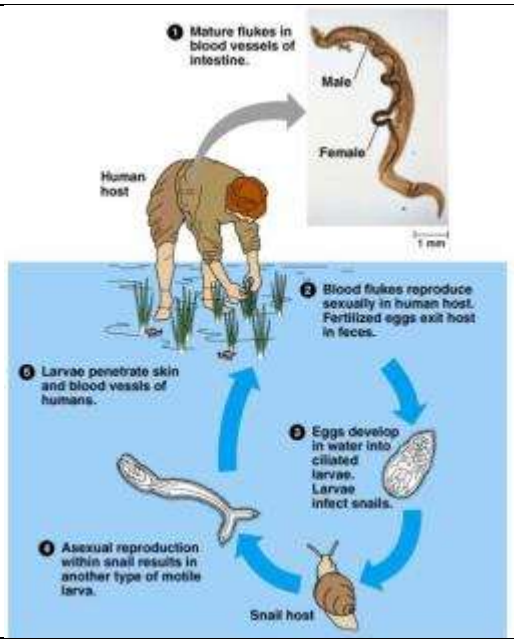
Common sites for Bilharzial polypi in intestines are ***the pelvic colon and rectum.***

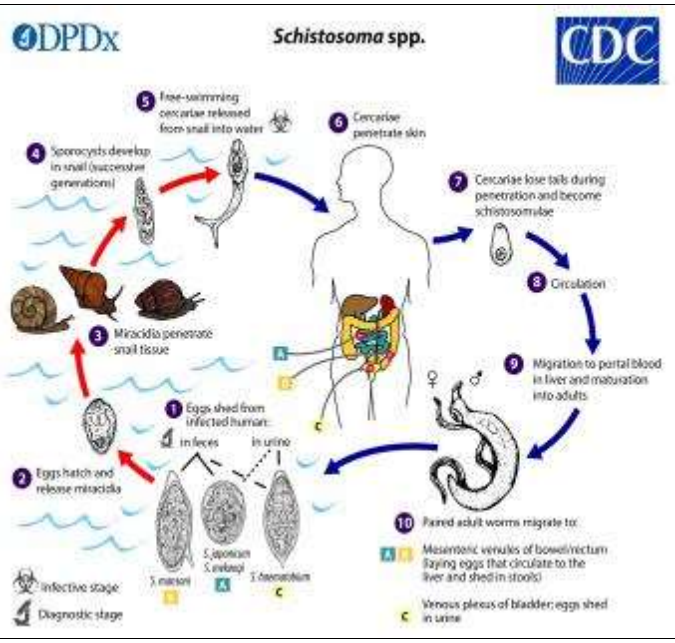
N.B.2:

- ***Bilharziasis of the alimentary canal is due to Schistosoma mansoni in most cases (87%) and to S. haematobium in some cases (13%).***

Sites: ***Most common (and may start) in***

- ***The <u>rectum,</u>***
- ***Then extends upwards to pelvic colon,***
- ***Other parts of colon and, in severe cases,***
- ***In all the intestines.***





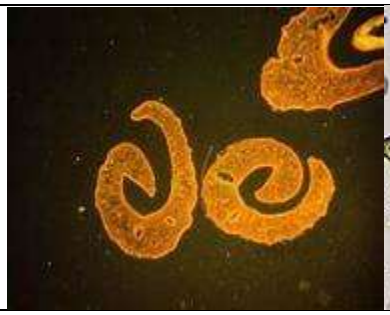
Fate of S. ova:

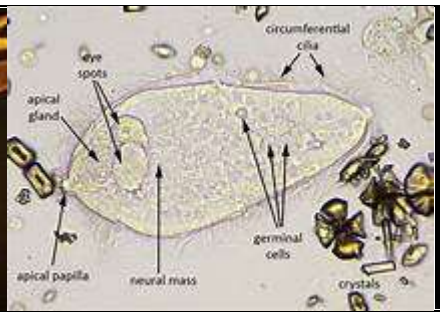
- ***<u>Ova are laid usually in the submucosa (more vascular):</u>***

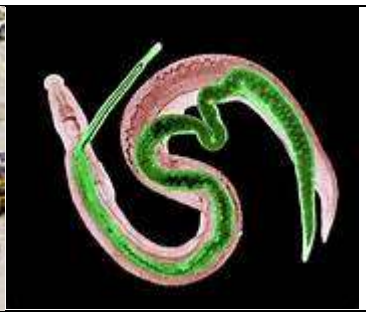
1. ***Some ova pierce through the mucosa → <u>pass in faeces.</u>***
2. ***Some ova are <u>phagocytosed (by histiocytes and giant cells).</u>***
3. ***Many ova remain in the tissue → excite <u>Bilharzial reaction around them or may die and then calcify.</u>***
4. ***Bilharzial granulation tissue → <u>fibrous tissue.</u>***

Fate of worms:

- ***Many are present in the coats of the gut (and even in other sites in the body); they may deposit eggs <u>which are permanently shut in deep structures</u> → a closed Bilharzial lesion (no ova pass in the faeces).***
- ***Usually, it is an open Bilharzial lesion → <u>ova, blood and mucus pass in faeces</u> → Bilharzial dysentery.***



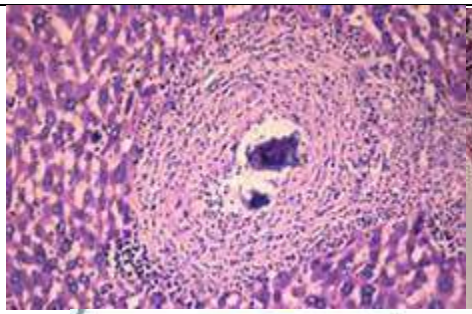


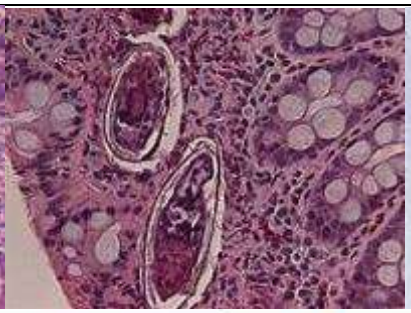


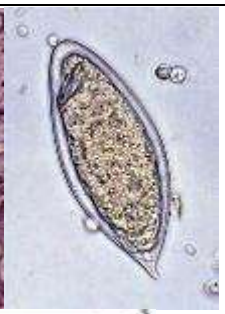
Manifestations

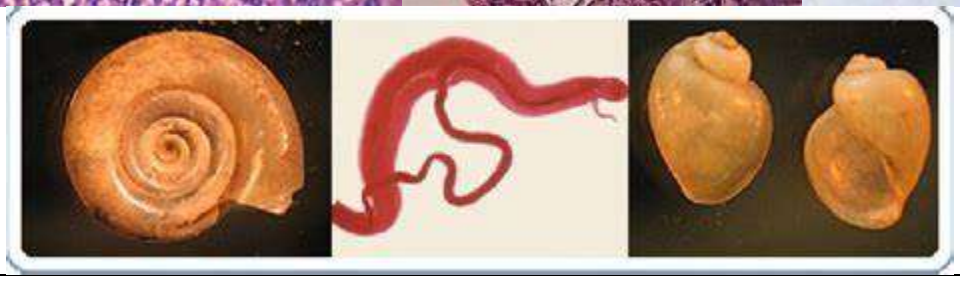
1. ***Bilharzial dysentery due to colitis.*** ***S. ova under the mucosa → congestion and oedema,*** *then fibrosis → fixation of mucous membrane to the underlying submucosa.*
2. ***Sandy patches:*** *Dirty yellow granular patches due to calcified S. ova.*
3. ***Ulceration:***
   - ***Primary*** *(levelling with the surface of mucosa) and/or*
   - ***Secondary*** *(on surface of* polypi).
4. They are irregular ulcers with ***denuded edges; when scraped by a glass slide*** → ova are detected by microscopic examination.
5. ***Polypi:*** Specially marked in the rectum; frequently compound, branched and flat.
6. ***If ulcerate*** → dysenteric symptoms; and, if twisted → watch-glass ulcers.

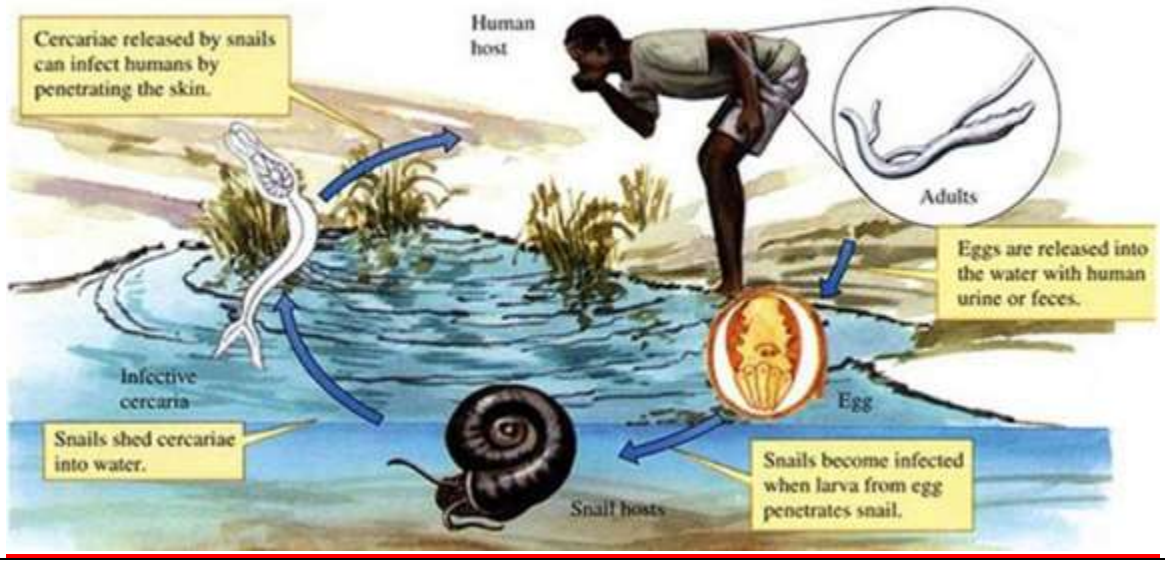
- ***The polyps may contain living or/and dead S. ova, worms as well as Bilharzial cellular reaction and granulation tissue.***
- ***Carcinoma in the large intestine*** ***may be associated with Bilharziasis of the intestine but there is yet no proof of an inter-relationship between them in the large intestine.***
- ***Stricture and obstruction*** ***of the intestine are very rare because the lumen of colon is wide enough and because the S. ova are chiefly deposited in the submucosa and only rarely in the musculosa.***
- ***Bilharziasis of the small intestine*** ***may occur in rare cases.***
- ***Usually the lesions produced are not easily detected by naked-eye examination.***
- ***However, S. ova*** ***can be detected on microscopic examination.***
- ***The stomach*** ***is a very rare site for deposition of S. ova (only in severe infection).***
- ***The mesenteric lymph nodes and peritoneum may also show Bilharzial lesions.***





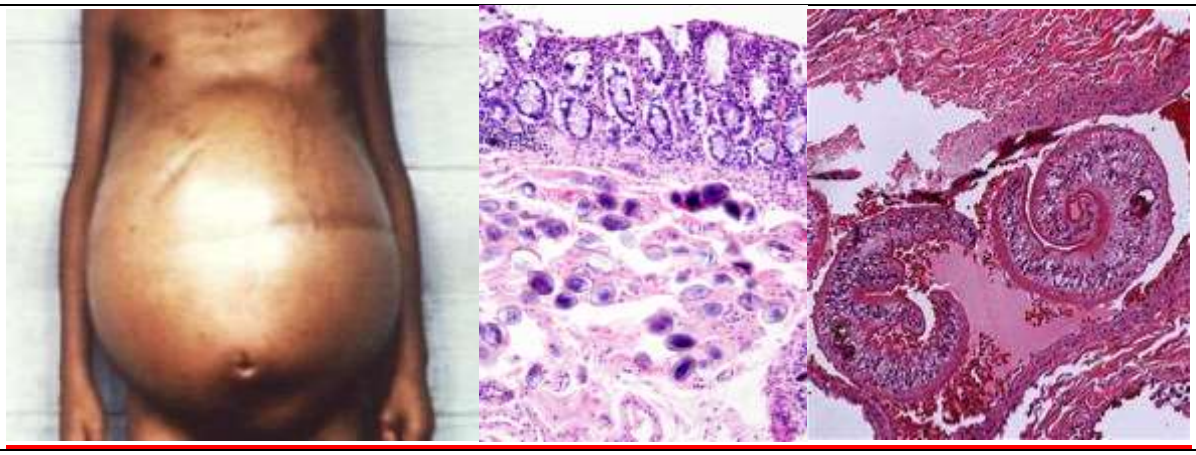


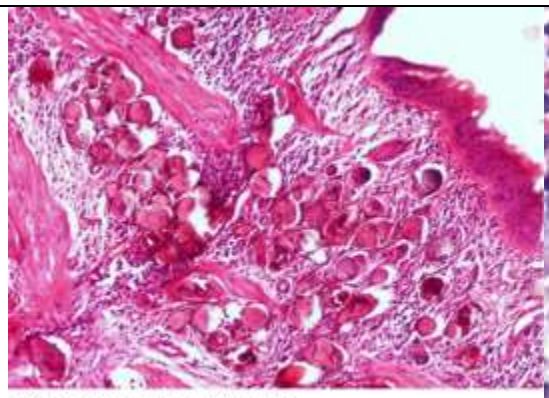




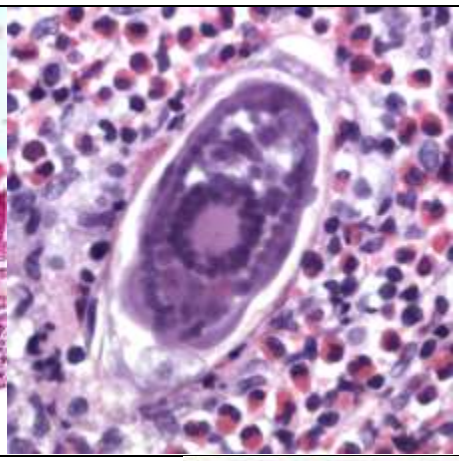
Sites of Bilharzial lesions in the intestine:

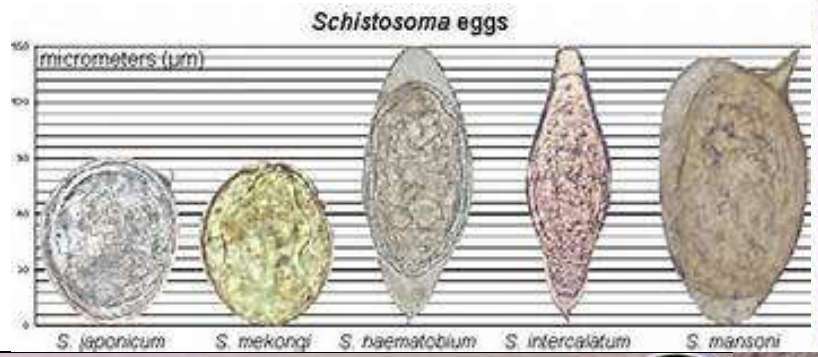
1. ***Submucosa (common) → thickened (diffusely or nodular) → rusty or dirty-white.***
2. ***Subserosa (less common) → diffuse or nodular lesions.***
3. ***Musculosa (less common) → local destruction and replacement by Bilharzial granulation tissue.***
4. ***Peri-colonic → large (or small) masses under the peritoneal covering (or in between the two layers of mesocolon) → false tumour-like nodules (felt by palpation) → very little obstruction.***

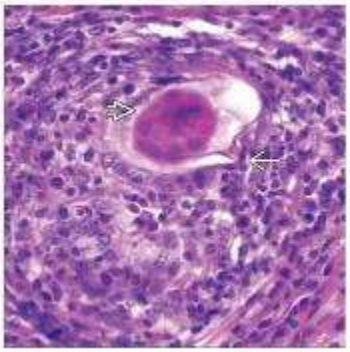


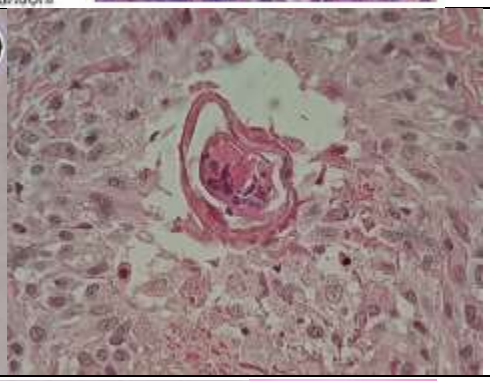


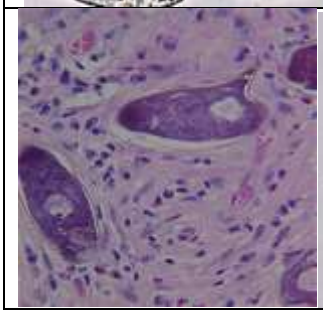
Schistosome eggs in submucosa











Intestinal Bilharziasis

A piece of large intestine:	Is thickened		
	Mucosa:	• Yellow (in parts) • Congested (in parts) • Haemorrhagic (few areas) • Greyish-brownish-reddish	
	Lumen:	Is narrowed (slightly)	
	Wall:	Shows fibrous tissue-overgrowth	
	Shows:	1. Ulcers 2. Polypi 3. Sandy patches	
	Ulcers:	• Numerous • Small • Superficial • Round (or ovoid) • Have clear cut edges (few) • Show finely-granular irregular edges (moth-eaten appearance; majority) • Few are confluent and moderately large • Greyish-brownish (or brownish-grey) • Finely-granular floor	
	Polypi:	• Multiple • Sessile or/and pedunculated • Granular surface • Occasional secondary ulcers" on their surface	
	Sandy patches:	• Very few scattered greyish-yellow patches	

N.B.:

- *To verify the diagnosis, the scrapings of the mucosa of the rectum are examined for Bilharzia ova.*
- Usually in Bilharziasis of the intestine, no actual Bilharzial stricture occurs.