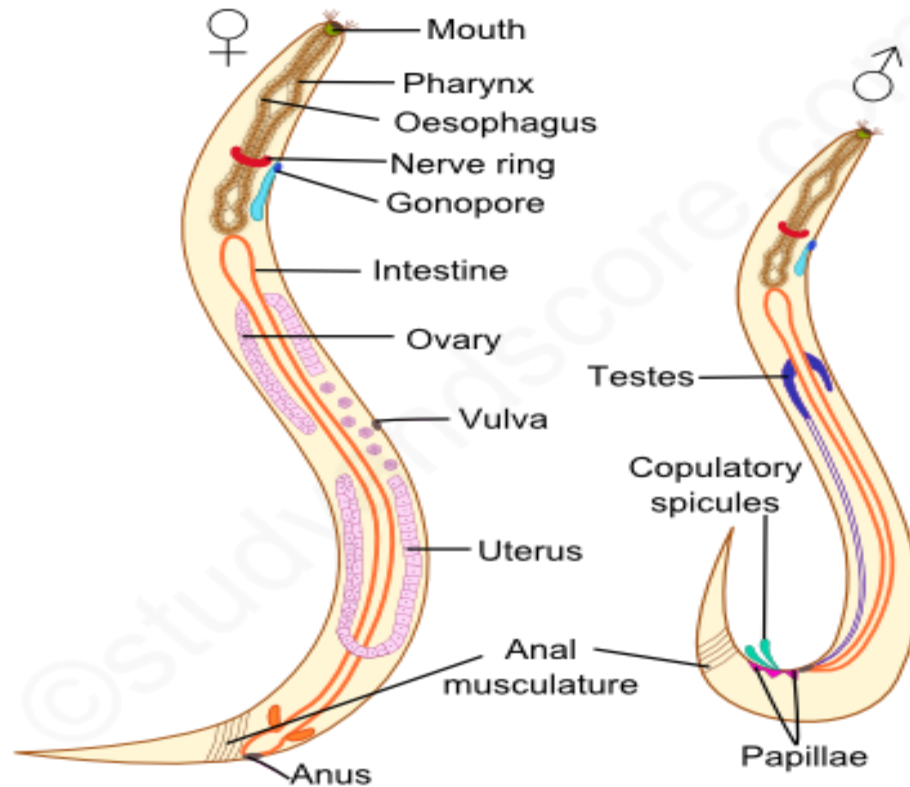


Wuchereria bancrofti and
Onchocerca

Wuchereria bancrofti

- Filariasis/ Elephantiasis
- Also known as *Filaria bancrofti*
- Occurs worldwide
- Inhabits lymphatic system,
- Sheathed Microfilariae in blood
- Vector species include female mosquitoes of *Culex*, *Aedes* and *Anopheles*
- **Morphology:**
- Adult worm and microfilaria

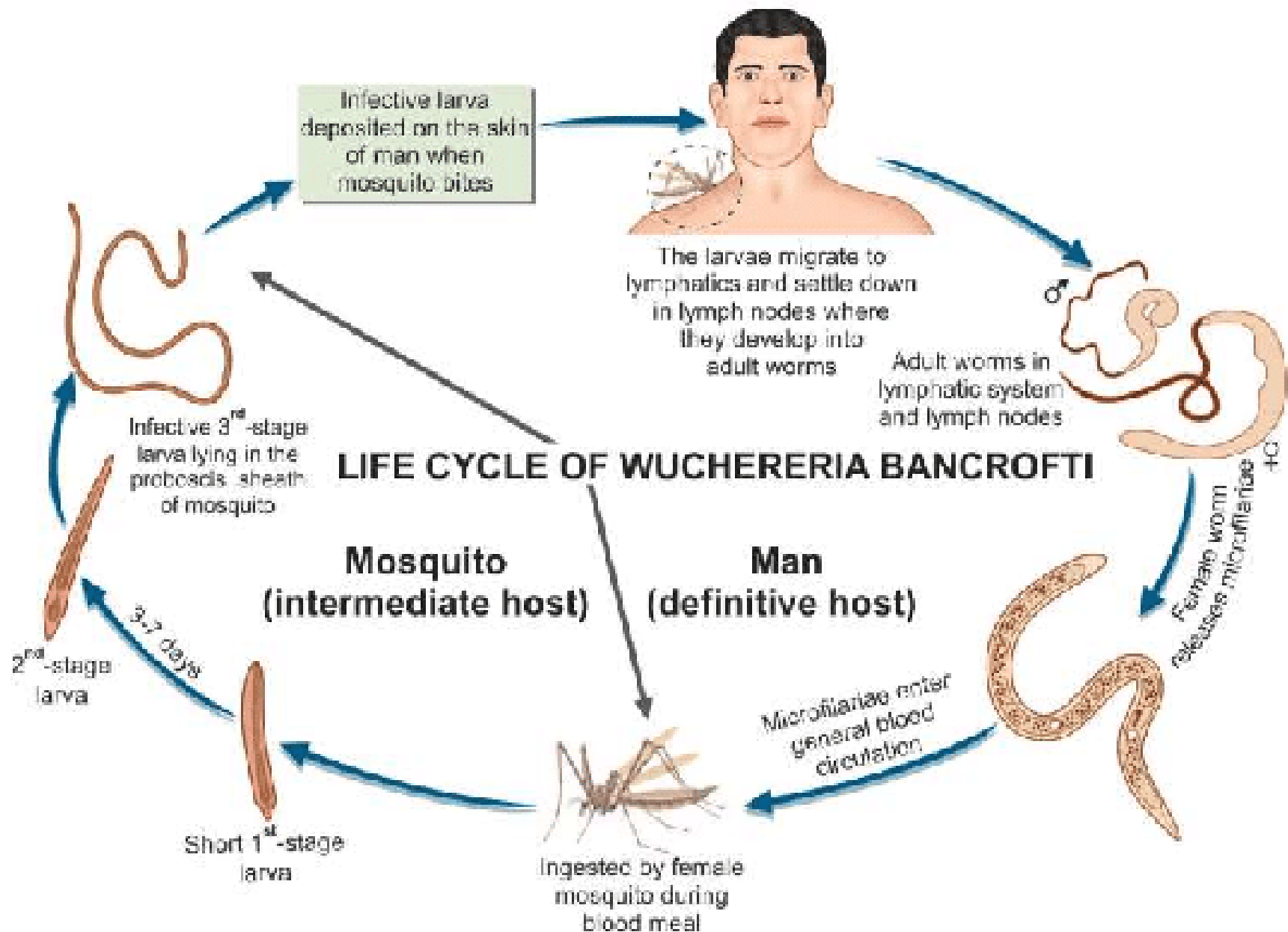
Morphology



WUCHERERIA - ADULT FEMALE AND MALE

©studyandscore.com

<https://www.google.com/search?q=Wuchereria+bancrofti+morphology&tbm=isch&ved=2>



<https://www.google.com/search?q=Wuchereria+bancrofti+life+cycle&tbm=isch&ved=>

Clinical features

- Infection - Wuchereriosis/ Lymphatic filariasis/ Bancroftian filariasis
- Pathogenic states are produced only by adult worm (living/ dead) – classical filariasis
Occult filariasis – lesions produced by microfilaria
- Clinical states in classical filariasis can be classified as:
 - Asymptomatic (in endemic areas)
 - Inflammatory – lymphadenitis, lymphangitis, fever, lymphoedema
 - Obstructive – elephantiasis, lymphangiovarix, chyluria, hydrocele
 - Tropical pulmonary eosinophilia

Diagnosis

- Eosinophilia
- Stool examination
- Sigmoidoscopy

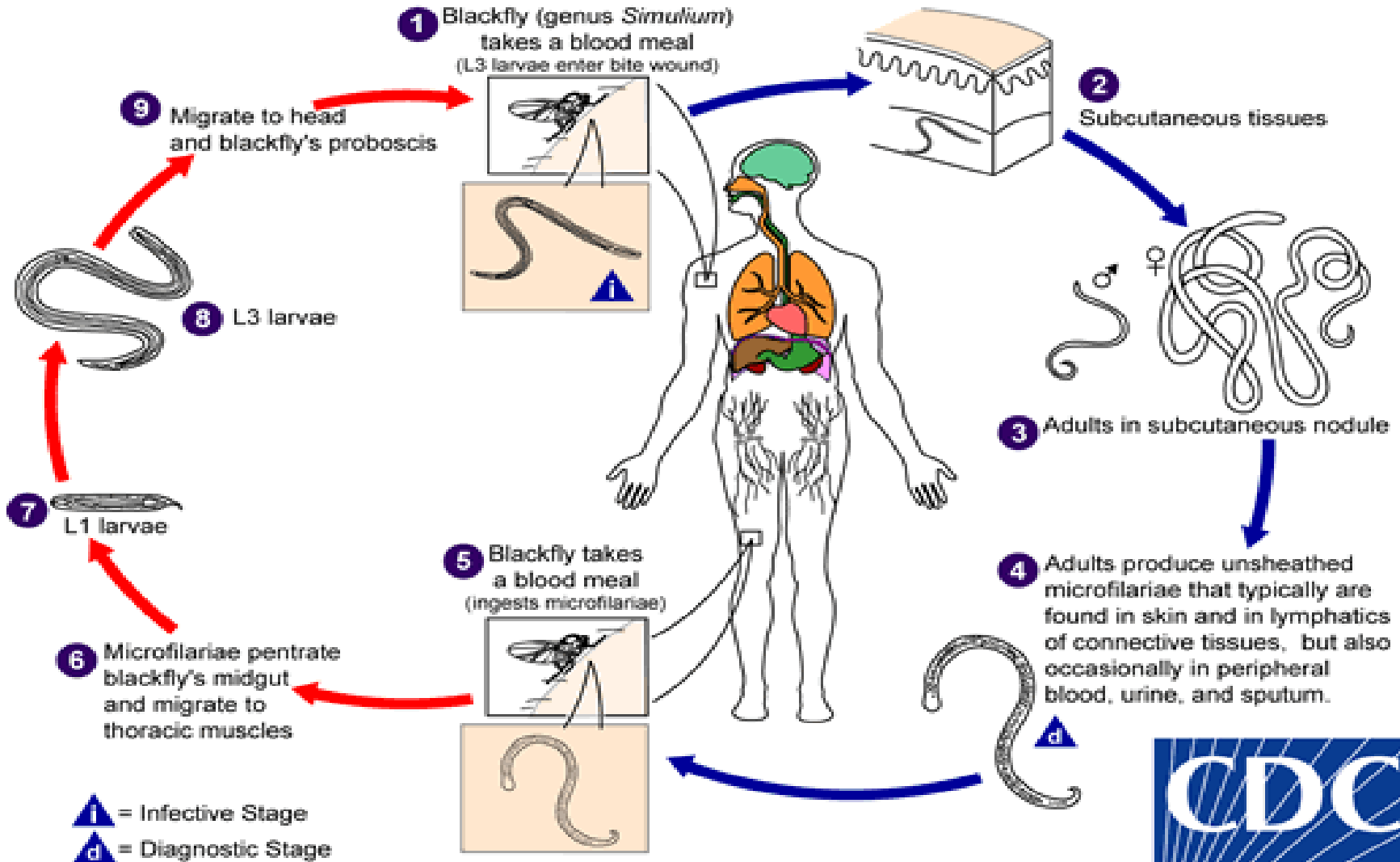
- **Prophylaxis:**
- Sanitary disposal of feces
- Solution of chlorpicrin will kill the eggs in soil
- not consuming the raw and uncooked fruits and vegetables

Onchocerca (Blinding filaria)

Onchocerca volvulus

Blackfly Stages

Human Stages



<https://www.google.com/search?q=onchocerca&tbm=isch&ved=2ahUKEwjIgOre-rLpAh>

Clinical sign/symptom	Grading	Description
Skin manifestation	0	Normal
	1	Permanent itching without onchodermatitis
	2	Onchodermatitis (with papules/thickening of skin/secondary infections)
	3	Atrophy of skin, loss of elasticity, paper thin skin (prematurely aged)
	4	Mottled depigmentation (leopard skin)
	5	Sowda (hyperpigmented thickened skin, unilateral)
	6	Hanging groin
Visual manifestation	0	No visual impairment (6/18 or more in Snellen Chart)
	1	Visual impairment (3/60 < reads < 6/18 in Snellen Chart)
	2	Severe visual impairment (3/60 < reads < 6/60 in Snellen Chart)

<https://www.google.com/search?q=onchocerca+clinical+features&tbm=isch&ved=>

Diagnosis and prevention

- **Diagnosis:**
- Finding of adult worm
- Finding of filaria
- (from iliac crest mostly),
- Can also be find from urine, sputum, CSF or lymph

- **Prevention and control:**
- Vector control with DDT or abate
- Biological control by *B. thuringiensis*