



# MICROBIOLOGY INICET PYQ KBMD

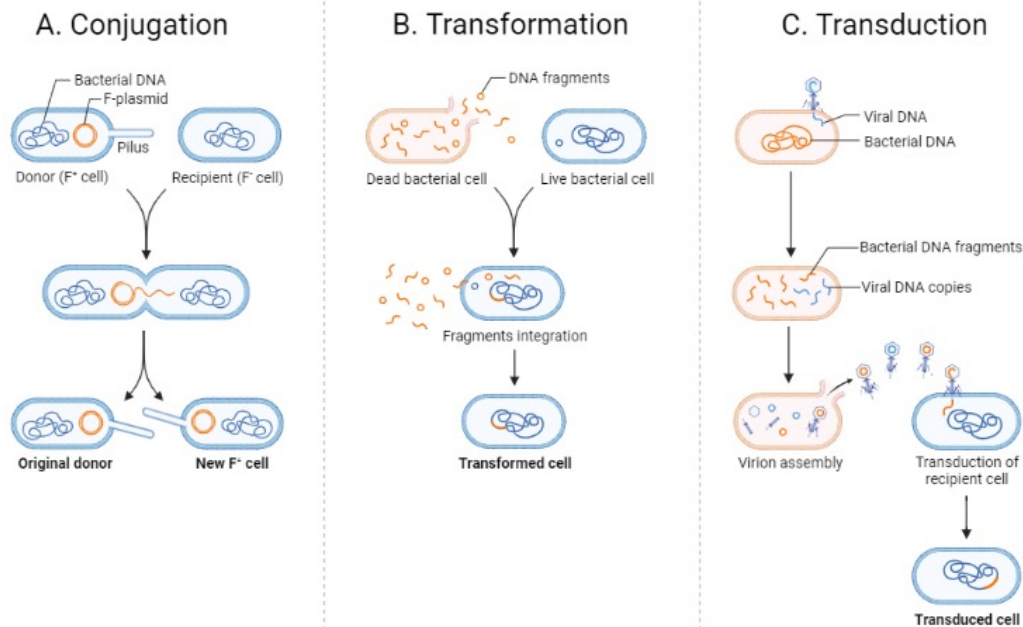
Medsynapse by Dr. Nikita

Phage mediated change in *C.diphtheriae* is due to which of the following



- a. Conjugation
- b. Transduction
- c. Transformation
- d. None of the above

MEDSYNAPSE  
Where Concepts Meet Mnemonics



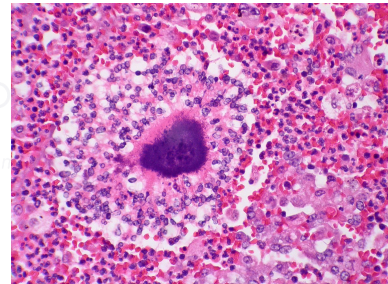
Which of the following structure is disrupted by *Vibrio cholerae*?

- Hemi desmosome
- Gap junctions
- Zona occludens
- Zona adherens

A 35-year-old male farmer presents with multiple discharging cervical sinuses. Which of these stains will be useful for the diagnosis? Where does this organism normally colonise in the body?



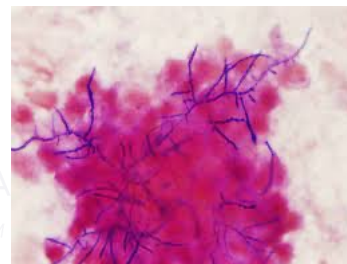
- a) Gram-stain, oropharynx
- b) PAS, intestine
- c) AFB, mouth
- d) Grocott Methenamine silver, skin



The following picture was seen in nasal biopsy from a patient with brain abscess. Identify the organism seen and the stain used?



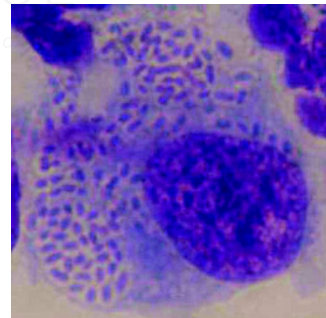
- a) Staphylococcus, Gram-stain
- b) Streptococcus, Gram-stain
- c) Cryptococcus, India ink
- d) Nocardia, Gram-stain



A 24-year-old female presented with an ulcer in the genital area. A Giemsa stained cervical smear was taken which showed the following image. Identify the causative agent:



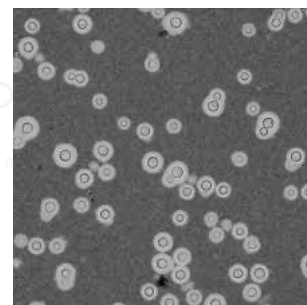
- a. Chlamydia
- b. **Gardenella vaginalis**
- c. Hemophilus ducreyi
- d. Calymmatobacterium donovani



A patient presented with headache and projectile vomiting along with alteration in sensorium. The following parasite demonstrated on India ink staining. What is the likely diagnosis?



- a. **Coccidioides**
- b. **Histoplasma**
- c. Blastomyces
- d. Cryptococcus



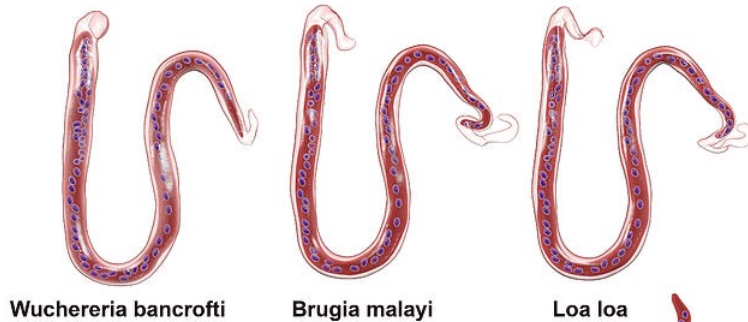
This is a diagram depicting body structure of which of these helminths?



- a) **Onchocerca volvulus**
- b) **Loa loa**
- c) **Brugia malayi**
- d) **Wuchereria bancrofti**



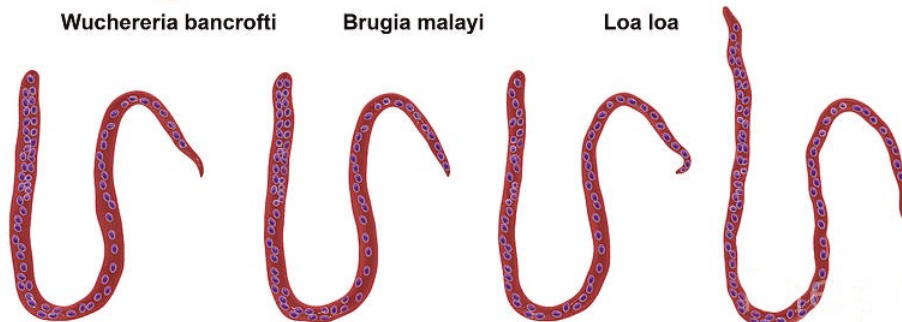
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Concepts Meet Mnemonic



Wuchereria bancrofti

Brugia malayi

Loa loa



Mansonella ozzardi

Mansonella perstans

Mansonella streptocerca

Onchocerca volvulus

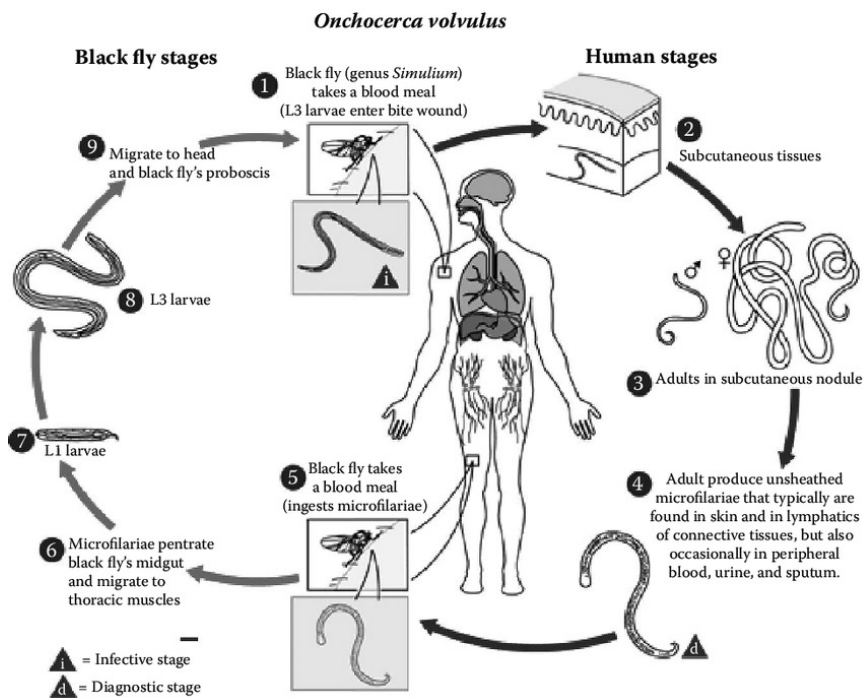


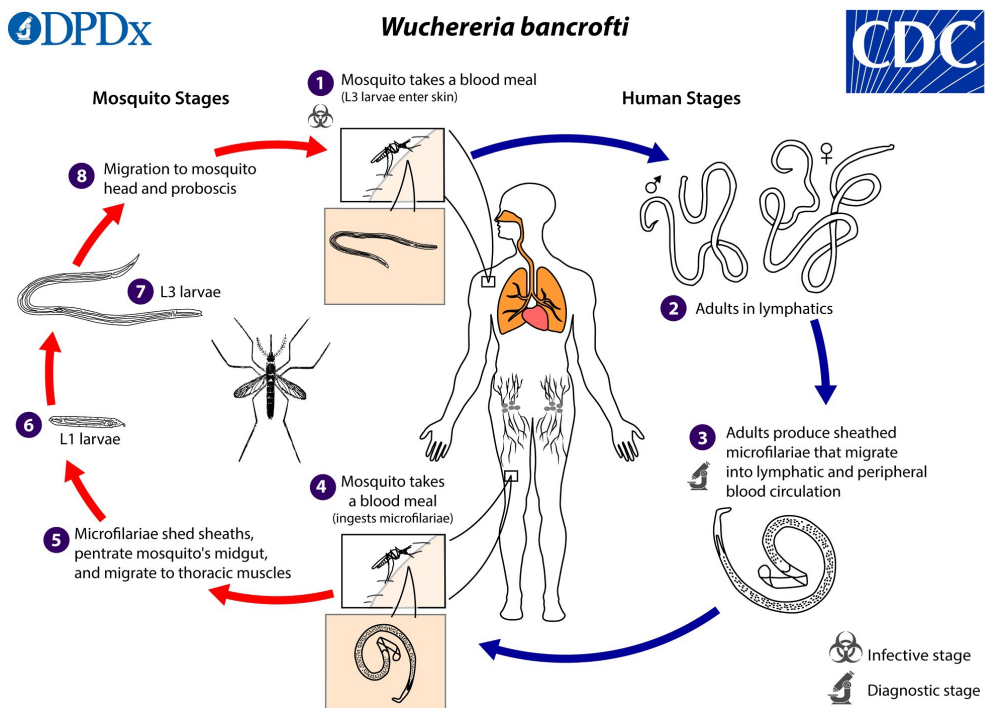


Adult stage of filarial worms responsible for diseases in all of the following except:

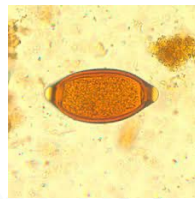


- a. *Brugia malayi*
- b. *Onchocerca volvulus*
- c. *Mansonella ozzardi*
- d. *Wuchereria bancrofti*

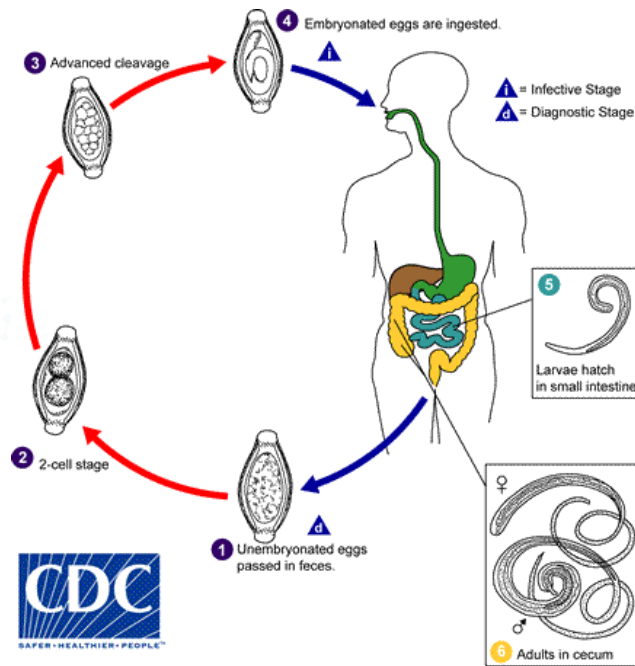




Stool examination in a patient reveals the following finding. What is the likely route of infection of this parasite?



- Ingestion of food contaminated with the egg of larva
- Insect bite
- Improperly cooked beef
- Swimming in dirty water pool



The following diagram depicts blood smear of which species?



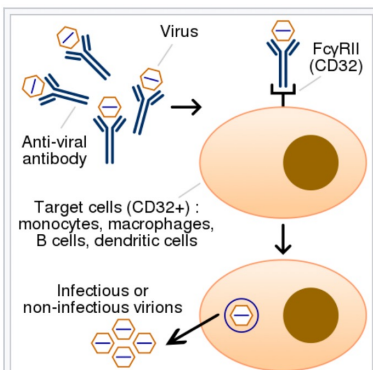
- a. Plasmodium vivax
- b. Plasmodium ovale
- c. Plasmodium falciparum
- d. Plasmodium malariae



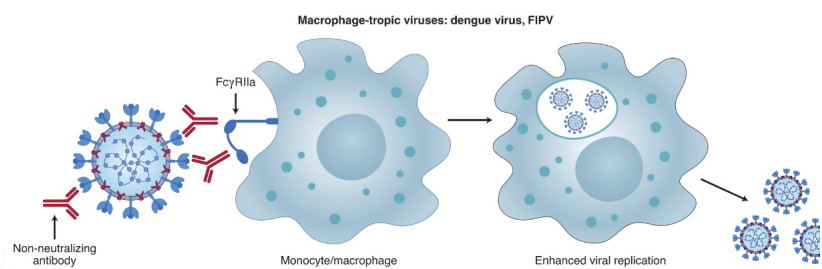


	<i>P. falciparum</i>	<i>P. vivax</i>	<i>P. ovale</i>	<i>P. malariae</i>
Ring stage				
Late trophozoite				
Schizont				
Female gametocyte				
Male gametocyte				

PSE  
remonics



In antibody-dependent enhancement, sub-optimal antibodies (the blue Y-shaped structures in the graphic) bind to both viruses and Fc gamma receptors (labeled FcγRII) expressed on immune cells, promoting infection of these cells.



Where Concepts Meet Mnemonics

Antibody-dependent enhancement is implicated in the immunopathogenesis of which disease?



- a. Influenza**  
**b. Staphylococcal toxic shock syndrome**  
**c. Waterhouse-Friderichsen syndrome**  
**d. Dengue hemorrhagic fever**



Antibody-dependent enhancement (ADE), sometimes less precisely called immune enhancement or disease enhancement, is a phenomenon in which binding of a virus to suboptimal antibodies enhances its entry into host cells, followed by its replication. [The suboptimal antibodies can result from natural infection or from vaccination. ADE may cause enhanced respiratory disease, but is not limited to respiratory disease. It has been observed in HIV, RSV virus and Dengue virus and is monitored for in vaccine development.]



A patient comes to your clinic with a complaint of multiple episodes of loose watery stool for 3 days. On probing, you discover that these episodes start after he had ingested shellfish at a local restaurant 3 days back and other people who had food from that restaurant had similar symptoms. What is the most common cause of viral diarrhoea in adults?



- a. Picornavirus
- b. Rotavirus
- c. Adenovirus
- d. Norovirus

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Reverse transcriptase is a RNA dependent DNA polymerase. Which of the following uses reverse transcriptase?



- a. Hepatitis A virus
- b. Hepatitis B virus
- c. Hepatitis C virus
- d. Hepatitis E virus

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