

# DERMATOLOGIC INFESTATIONS

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# INFESTATIONS

## Definition:

**To inhabit (sometimes in quantities large enough) to be harmful, threatening or obnoxious**

# INFESTATIONS

- ▶ **CREEPING ERUPTIONS**
- ▶ **SCABIES**
- ▶ **LICE – HEAD, BODY, AND PUBIC LICE**

# **CREEPING ERUPTIONS**



# CREEPING ERUPTIONS (LARVA MIGRANS)

- ▶ Infestation with the larvae of a cat or dog hookworm-*Ancylostoma braziliensi* or *caninum*
- ▶ Usual scenario: cat or dog infected with hookworm lays down eggs on soil → larvae hatch from eggs → penetrate skin
- ▶ Larva cannot go beyond basement membrane → moves underneath skin



# CREEPING ERUPTIONS

Recognition:

Serpiginous erythematous rash

Lesions may have papules and vesicles

Very pruritic

Complication: Secondary bacterial infection









# CREEPING ERUPTIONS

Treatment:

Oral:

Thiabendazole 50 mgs/kg/day x 5days

Albendazole

Ivermectin

Freeze with liquid nitrogen

Topical: make a thiabendazole ointment by crushing tablets and mixing with petrolatum

**SCABIES**

# SCABIES - HISTORY

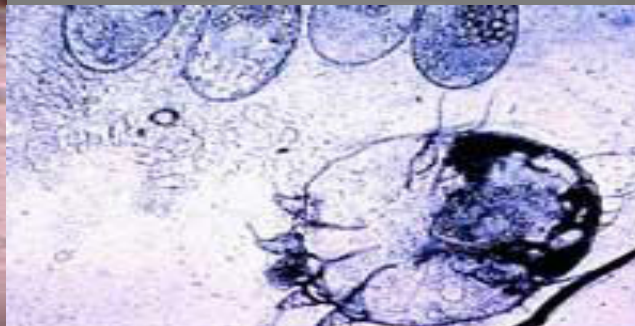
- ▶ From Latin word “scabere” = to scratch
- ▶ Deuteronomy 28:27 – first record (festering sores and rash with incurable itch)
- ▶ Aristotle – lice that escaped from pimples (315BC)
- ▶ Celsus – described in detail clinical picture (30 AD)
- ▶ Giovanni Cosimo Bonomo (1687) – “Observations concerning the fleshworm of the body” causing severe itch.

# INFESTATIONS - SCABIES

Highly infectious disease caused by *Sarcoptes scabiei* var. *humanus*

Usual scenario: An infected person (friend, kin, classmate, lover, Inday, with mature adult female mite) → comes in close contact → mite transfers

(sometimes sharing of linens, clothing, etc)



# SCABIES: RECOGNITION

- ▶ What: papules, vesicles, plaques +/- excoriations, crusting, burrows
- ▶ Where: interdigital webs, axillae, flexures of arms/wrists, beltline, genitalia, buttocks  
Note: May appear more generalized in infants

# SCABIES: RECOGNITION

- ▶ Very pruritic eruption!
- ▶ Similar pruritic eruption in other family members



















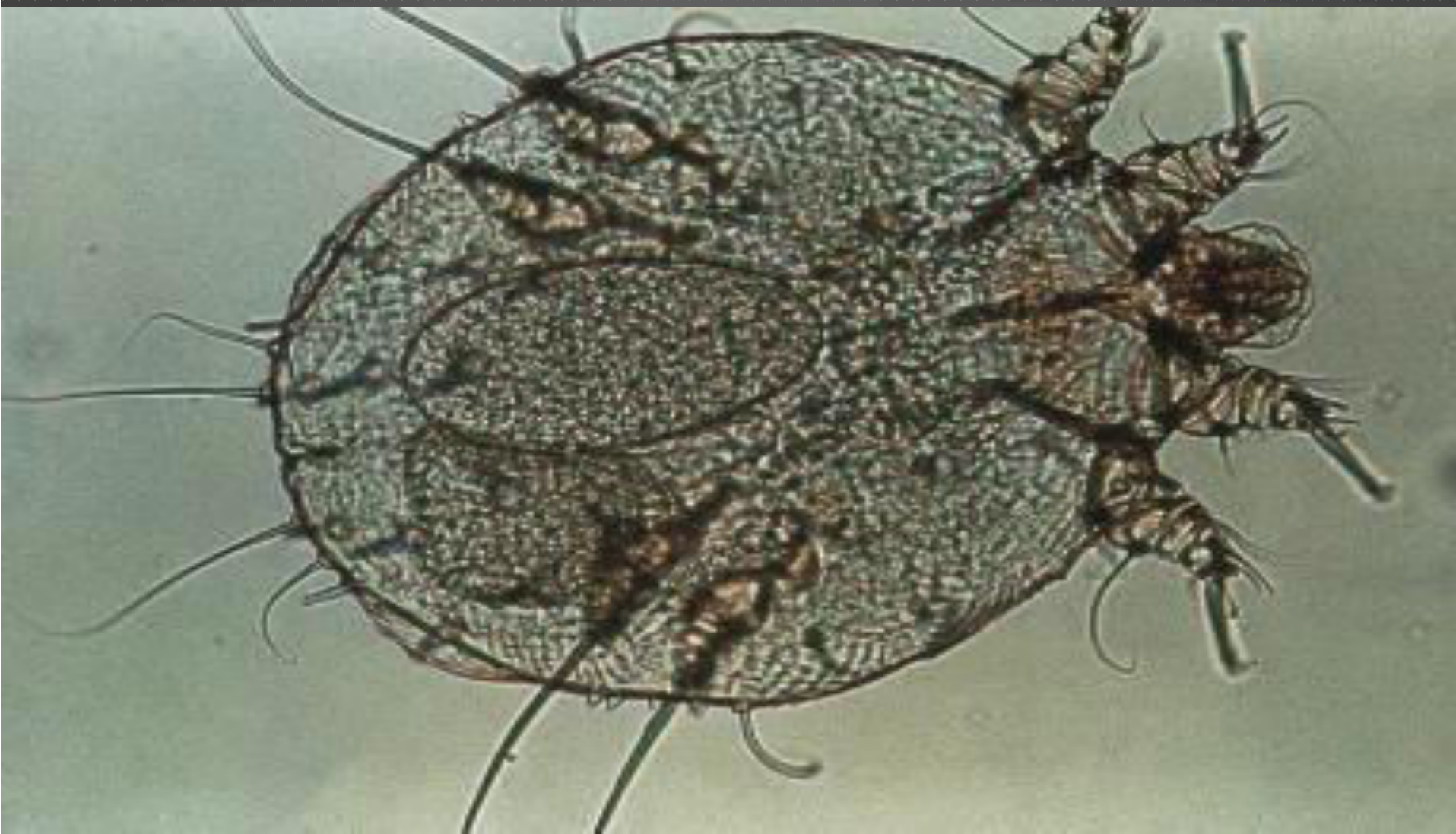


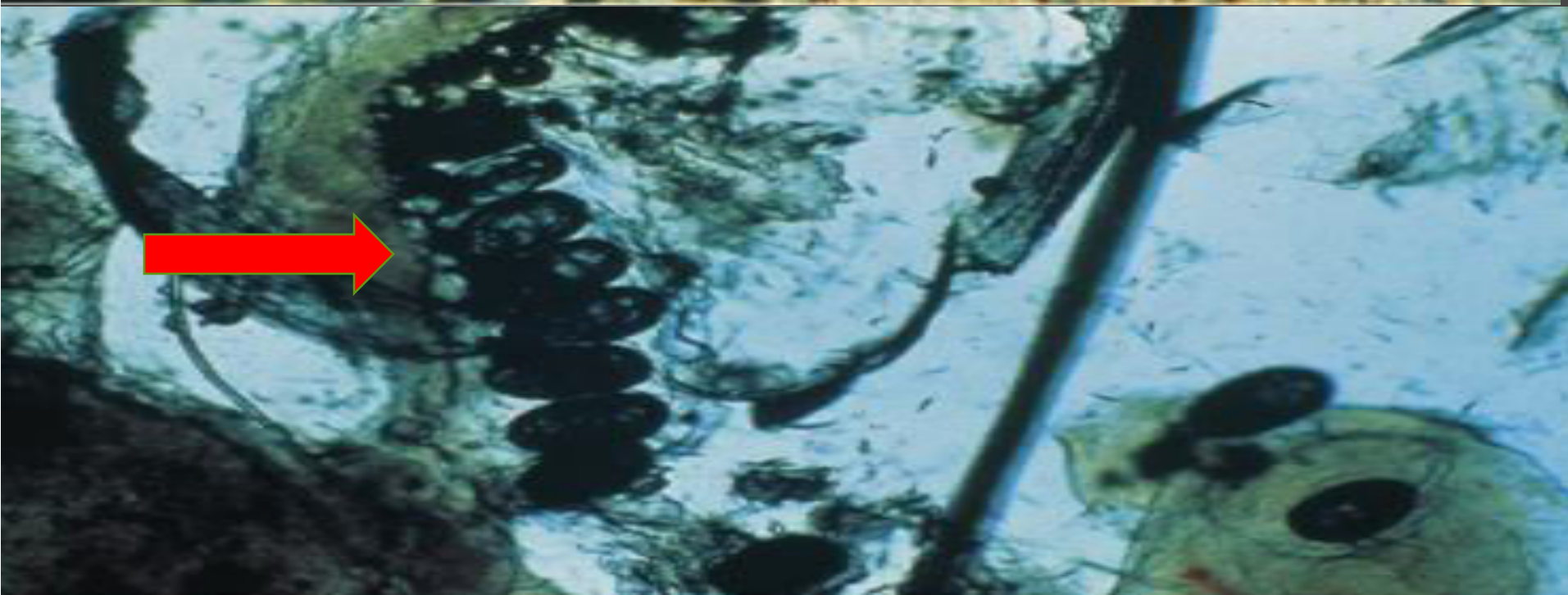
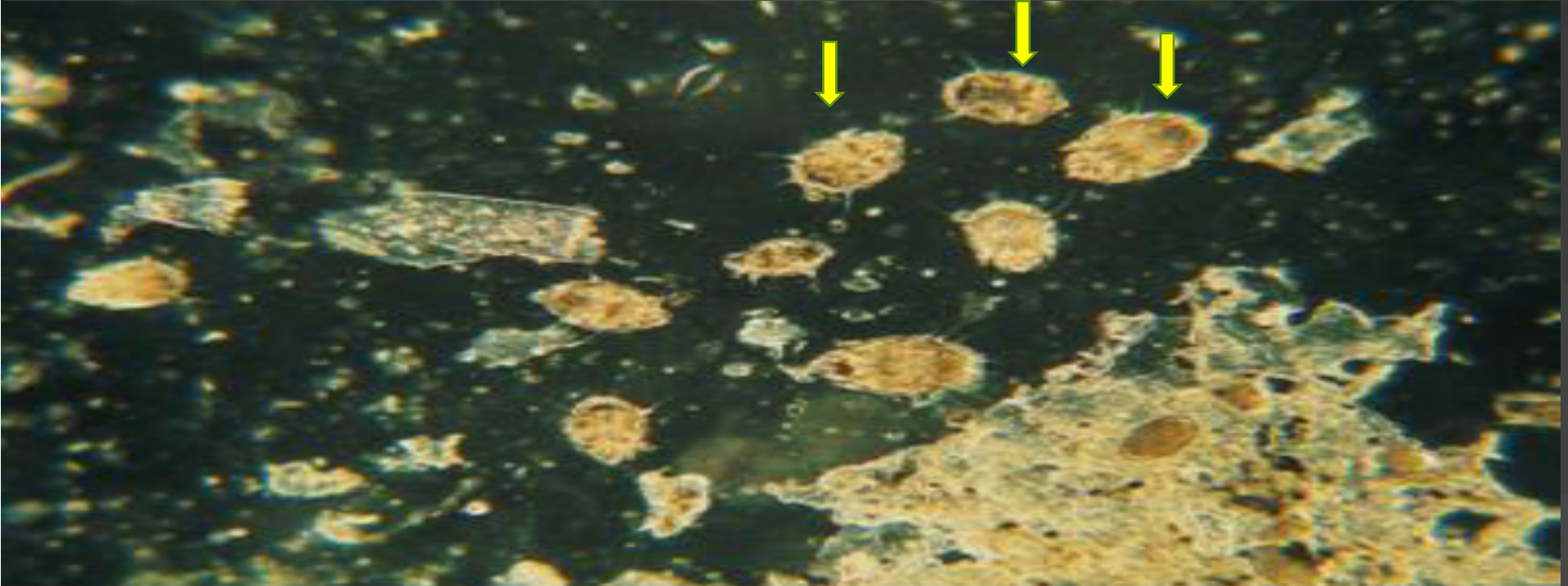


# SCABIES: DIAGNOSIS

- ▶ Demonstrate scabies mite, ova or feces (scybylla) using the mineral oil preparation

# MINERAL OIL PREP







# SCABIES: COMPLICATIONS

- ▶ Secondary bacterial infection!
- ▶ Others: lack of sleep, etc.







# SCABIES: MANAGEMENT

- ▶ Permethrin 5% Cream (Lotion)
  - > cure rate: 90%
  - > OK for children 2 months and above
  - > Apply from neck down overnight; repeat after one week
  - > Adverse rxn: contact/irritant dermatitis

Note: In infants with head and neck lesions, apply also on these areas

# SCABIES: MANAGEMENT

- ▶ 5% Sulfur ointment
  - > Cure rate: 40-60%
  - > OK for infants and children,  
pregnant and lactating mothers
  - > Apply daily for 7 days after bathing
  - > Adverse rxn: contact/irritant dermatitis

Note: In infants with head and neck lesions, apply also on these areas

# SCABIES: MANAGEMENT

- ▶ How to apply scabicides:

1. Apply to the whole body from neck down.

2. Take note of “problem areas” (umbilicus, under the nails).

3. If scalp and face are involved, apply to these affected areas.

# SCABIES: MANAGEMENT

4. All household contacts should be treated within the same 24 - 48 hour period.

Note: Kwell or lindane is no longer recommended in the Pediatric age group.

Supportive: sedating anti-histamines, systemic antibiotics, topical steroids

# SCABIES: MANAGEMENT

- ▶ Oral Ivermectin tablets
  - > approved for Strongyloides and Onchocerciasis
  - > use in children > 5 years (?safety)
  - > Dose: 200 ug/kg given twice (10-14 days apart)
  - > for mass treatment

# WHAT IS NORWEGIAN SCABIES?

- ▶ Scabies in neglected individuals harboring millions of mites
- ▶ Highly infectious : repeated treatment needed







LICE, LICE AND MORE  
LICE!!!!



Pediculus  
humanus capitis  
Head louse

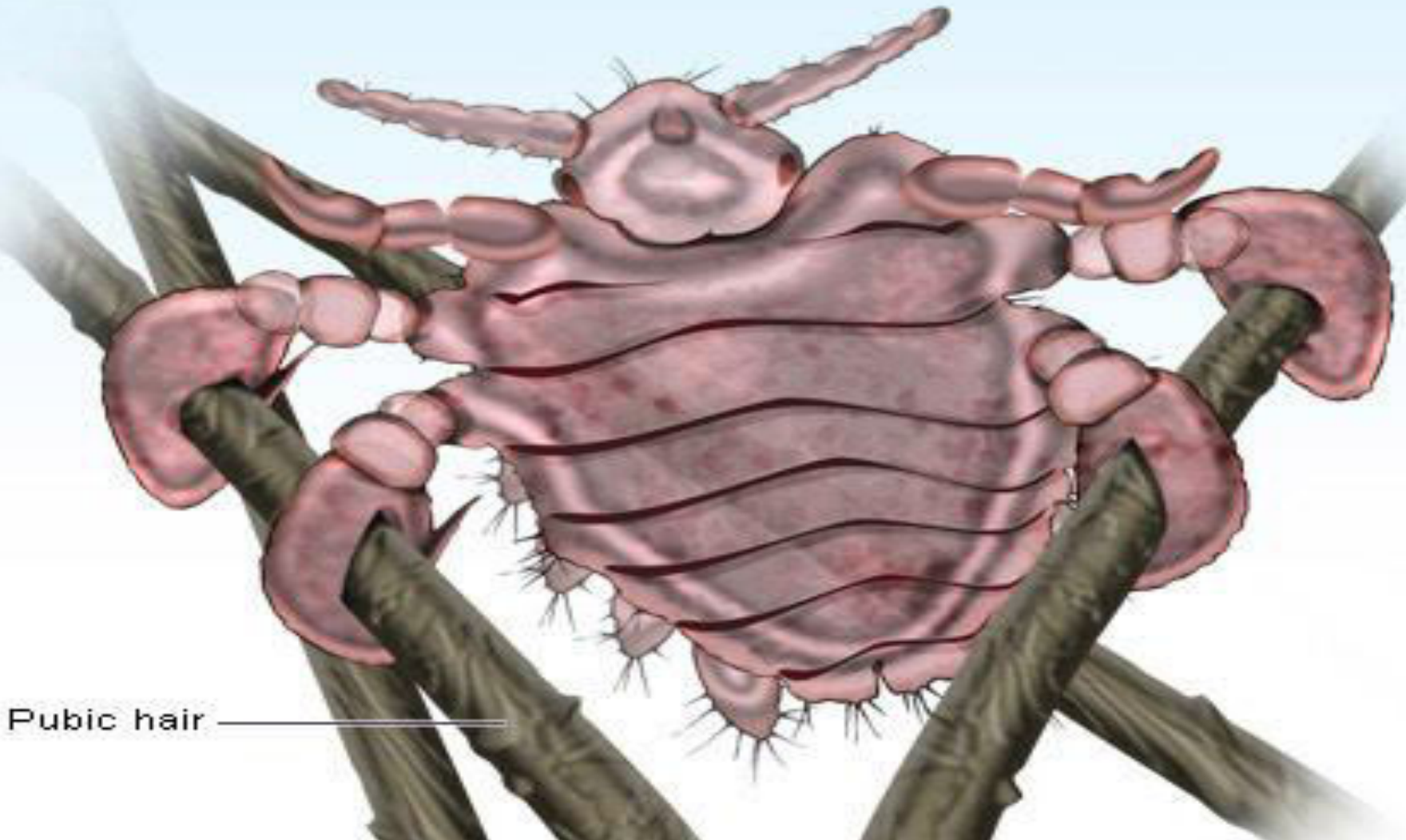


Pediculus humanus  
corporis  
Body louse



Phtirus pubis  
Pubic louse

# Pubic Louse ("crab louse")

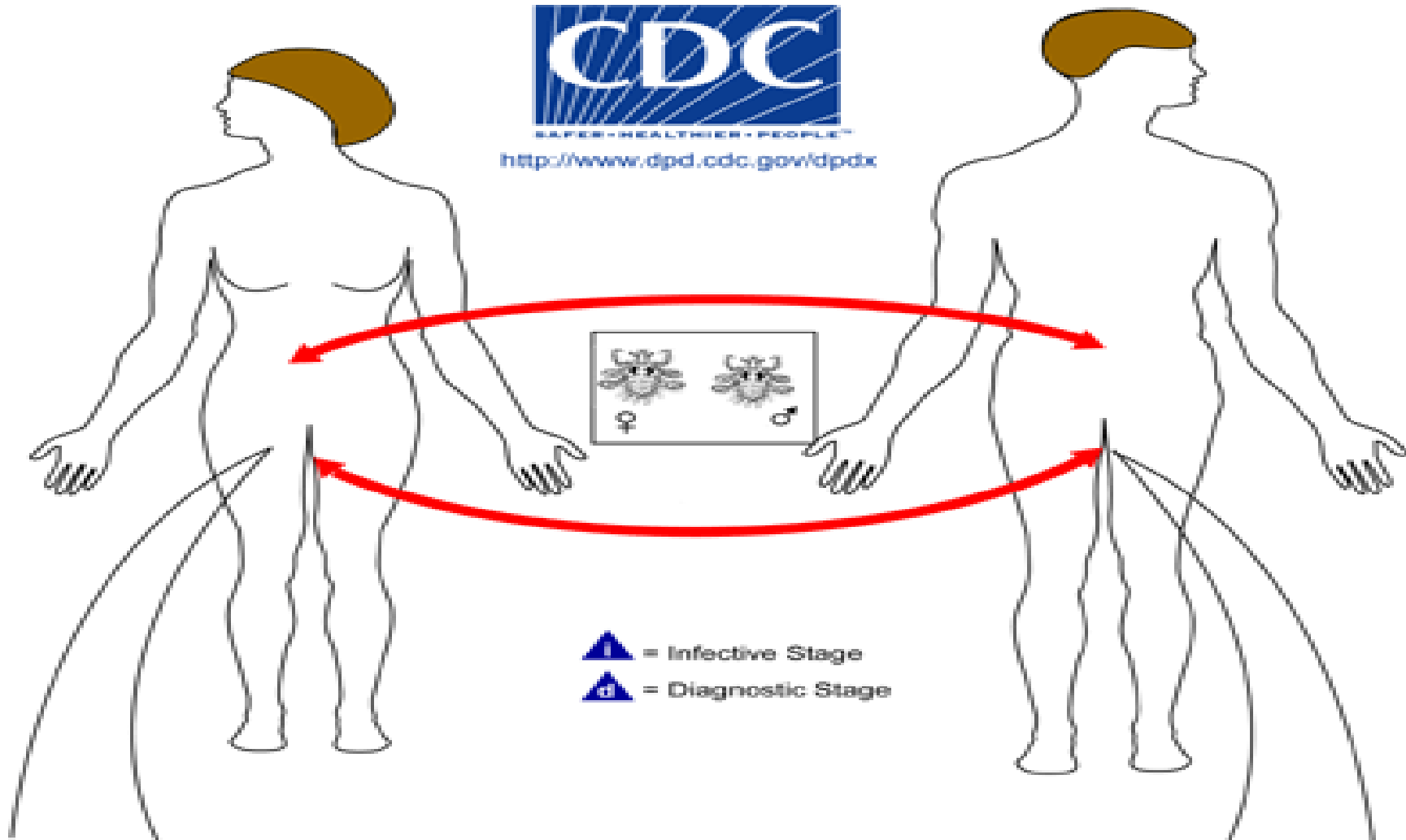


Pubic hair

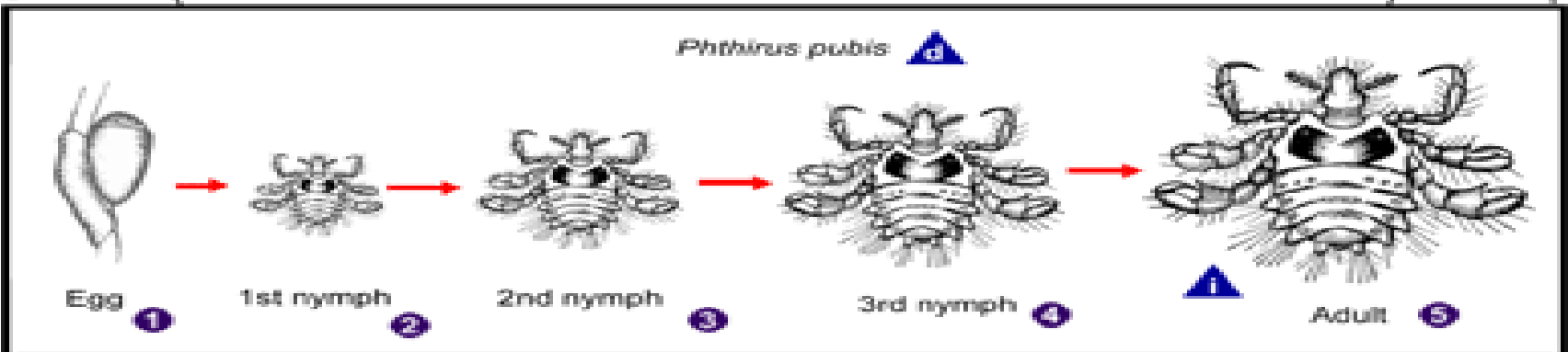
Similar species we share with gorillas



<http://www.dpd.cdc.gov/dpdx>



**i** = Infective Stage  
**d** = Diagnostic Stage





















# Treatment of Pubic Lice

1. Wash the infested area; towel dry.
2. Thoroughly saturate hair with lice medication. If using permethrin or pyrethrins, leave medication on for 10 minutes; if using Lindane, only leave on for 4 minutes. Thoroughly rinse off medication with water. Dry off with a clean towel.
3. Following treatment, most nits will still be attached to hair shafts. Nits may be removed with fingernails.
4. Put on clean underwear and clothing after treatment.
5. To kill any lice or nits (attached to hairs) that may be left on clothing or bedding, machine-wash those washable items that the infested person used during the 2-3 days before treatment. Use the hot water cycle (130°F). Use the hot dryer cycle for at least 20 minutes.
6. Dry-clean clothing that is not washable.
7. Inform any sexual partners that they are at risk for infestation.
8. Do not have sex until treatment is complete.
9. Do not have sex with infected partners until partners have been treated and infestation has been cured.
10. Repeat treatment in 7-10 days if lice are still found.



REVENGE **CRABS**.com

GET  
A  
BIKINI  
WAX!

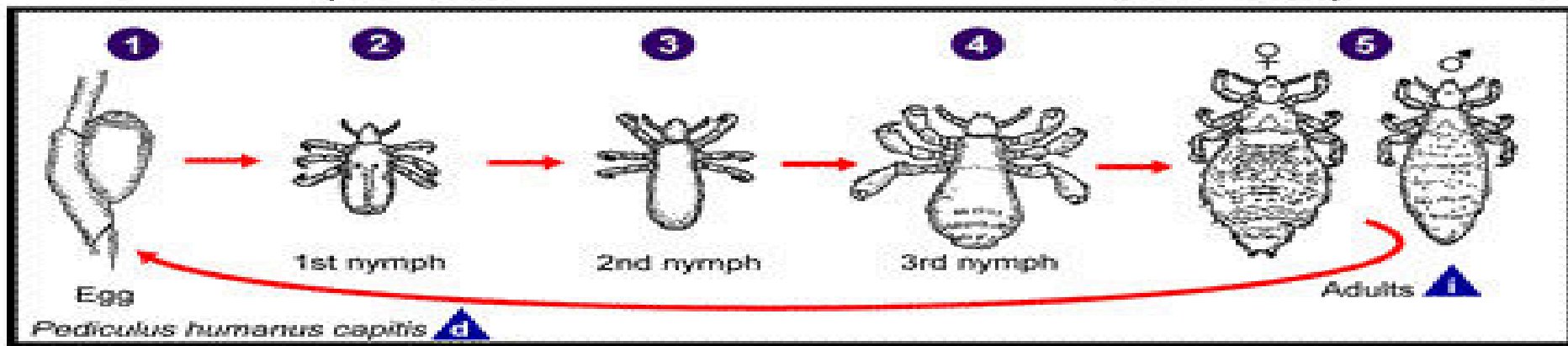
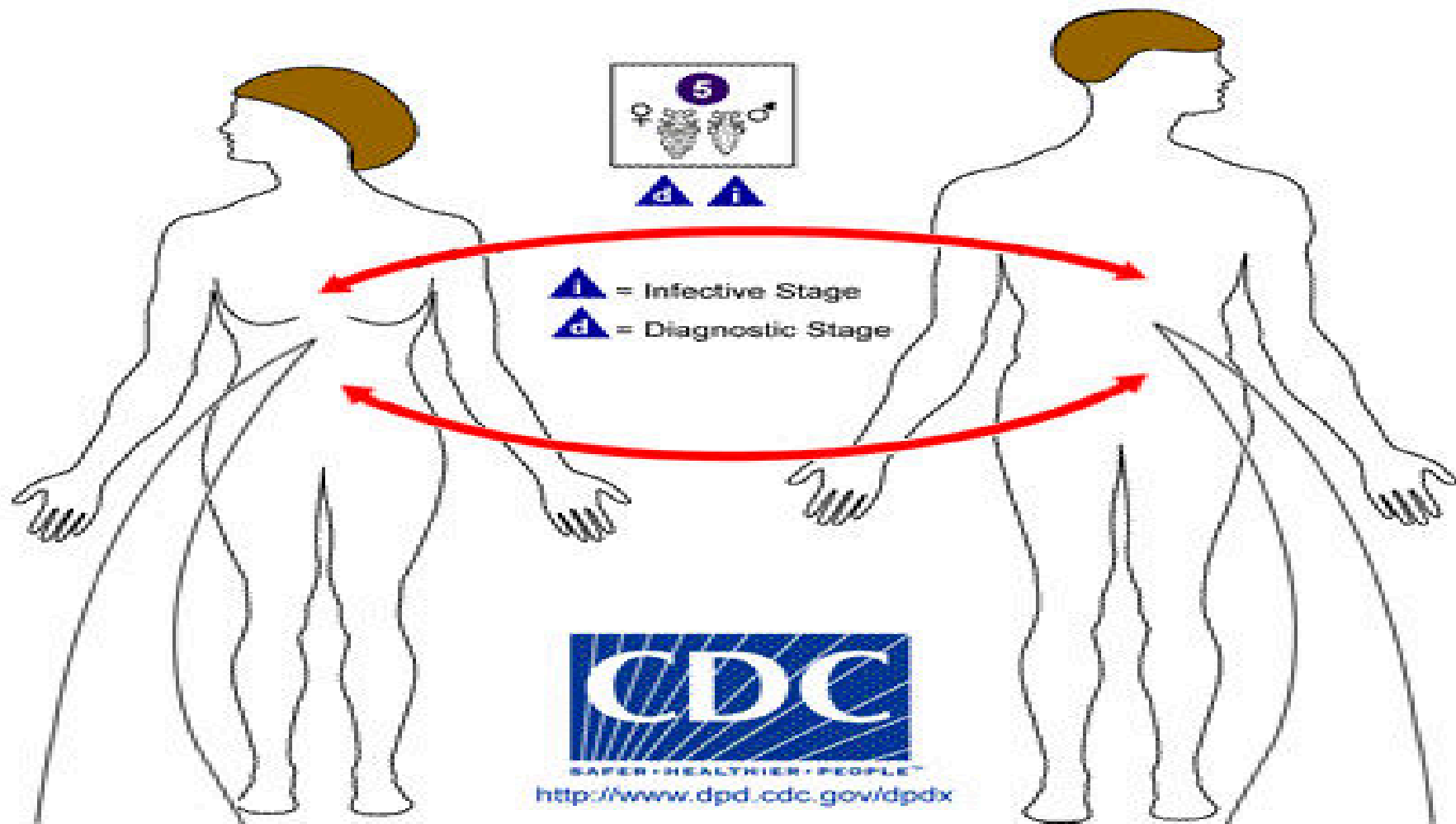


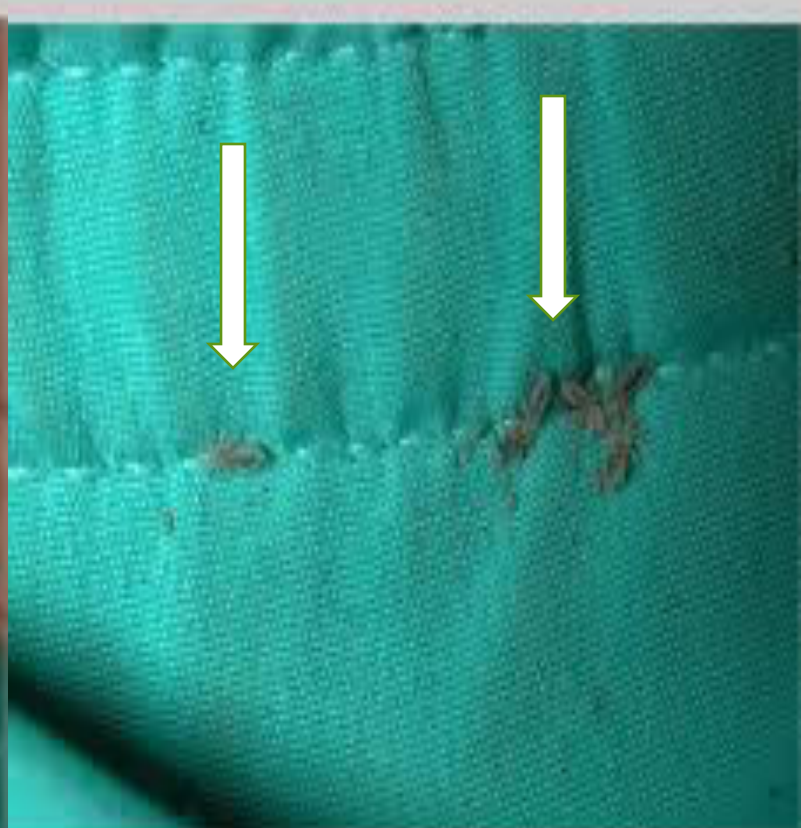
# BODY LOUSE



Species we share with chimpanzees







BODY LICE







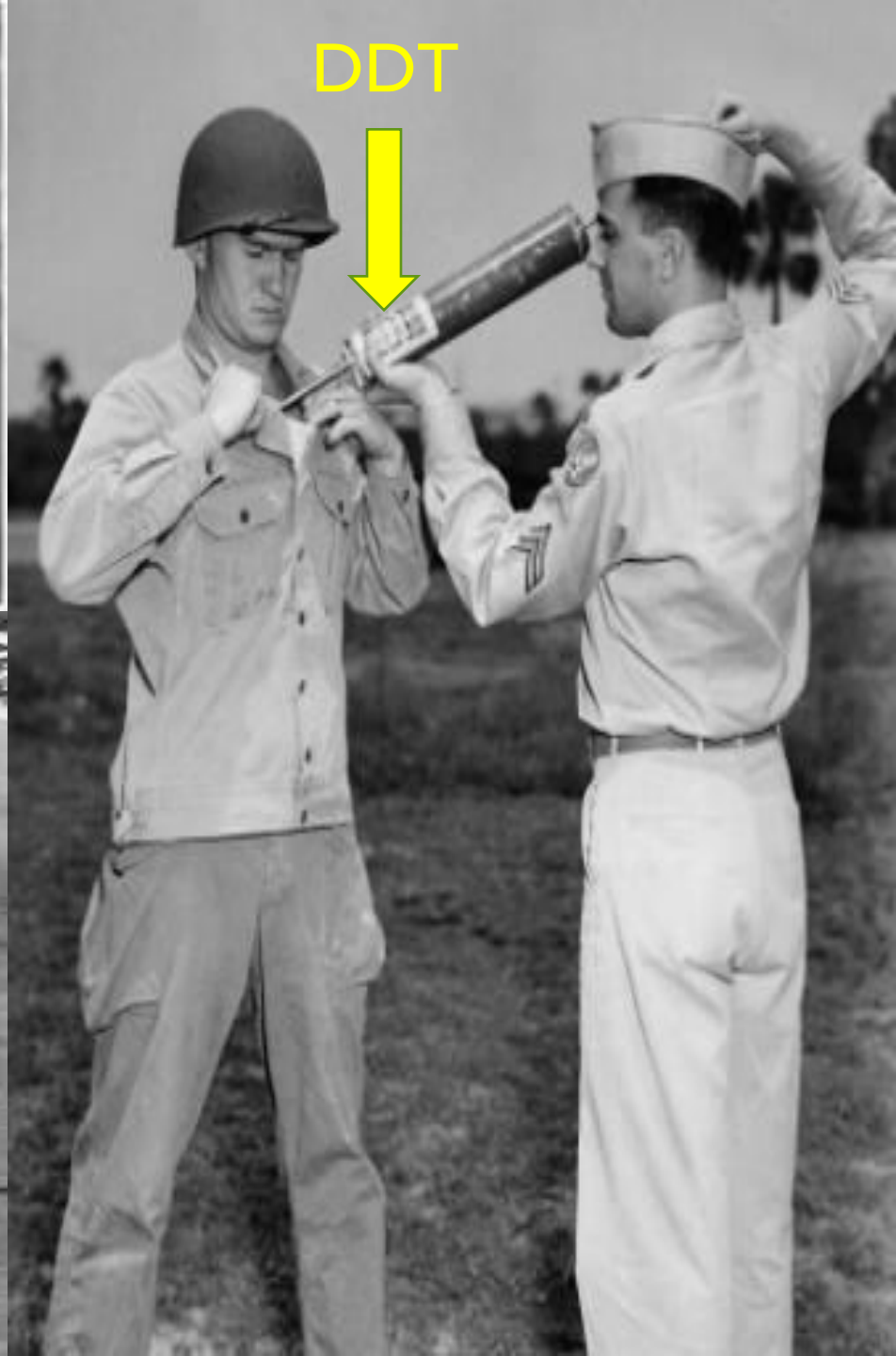
A little bit of  
history.....

.....





:"The lice were the size of grains of rice, each with its own bite, each with its own itch. When we could, we would run hot wax from a candle down the seams of our trousers, our vests - whatever you had - to burn the buggers out. It was the only thing to do.



Napoleon's army was decimated by typhus, a microbial passenger of the body louse, the organism called *Rickettsia prowazekii*. The name itself tells the story: the two researchers who were working to identify and isolate the pathogen, Howard T. Ricketts (d. 1910) and Stanislaus J.M. von Prowazek, each died as a result of typhus infection.

Guest Blog. Emily Willingham *Scientific American*, Feb 14, 2011





## Body lice

- Wash the body thoroughly.
- Wash and dry all bed linens and clothes in hot cycles.
- Destroy what you can because these nits can survive longer without human contact (up to 30 days).
- Anti-lice agents are usually **not** needed if clothing is thrown away and bed linens are thoroughly washed.
- Check all household members or close contacts. Treat them only if lice or nits are seen.
- Vacuum floors and furniture. Throw the vacuum bag away immediately.
- Chemical insecticide sprays in the home are not effective and not recommended.
- Use over-the-counter antihistamines (such as [diphenhydramine](#), [hydroxyzine](#)) for itching.
- Antibiotics if secondarily infected



**HEAD LOUSE**



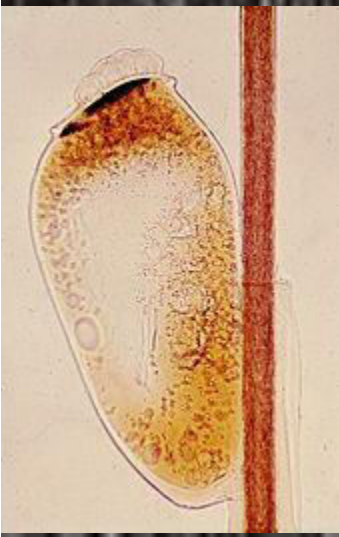


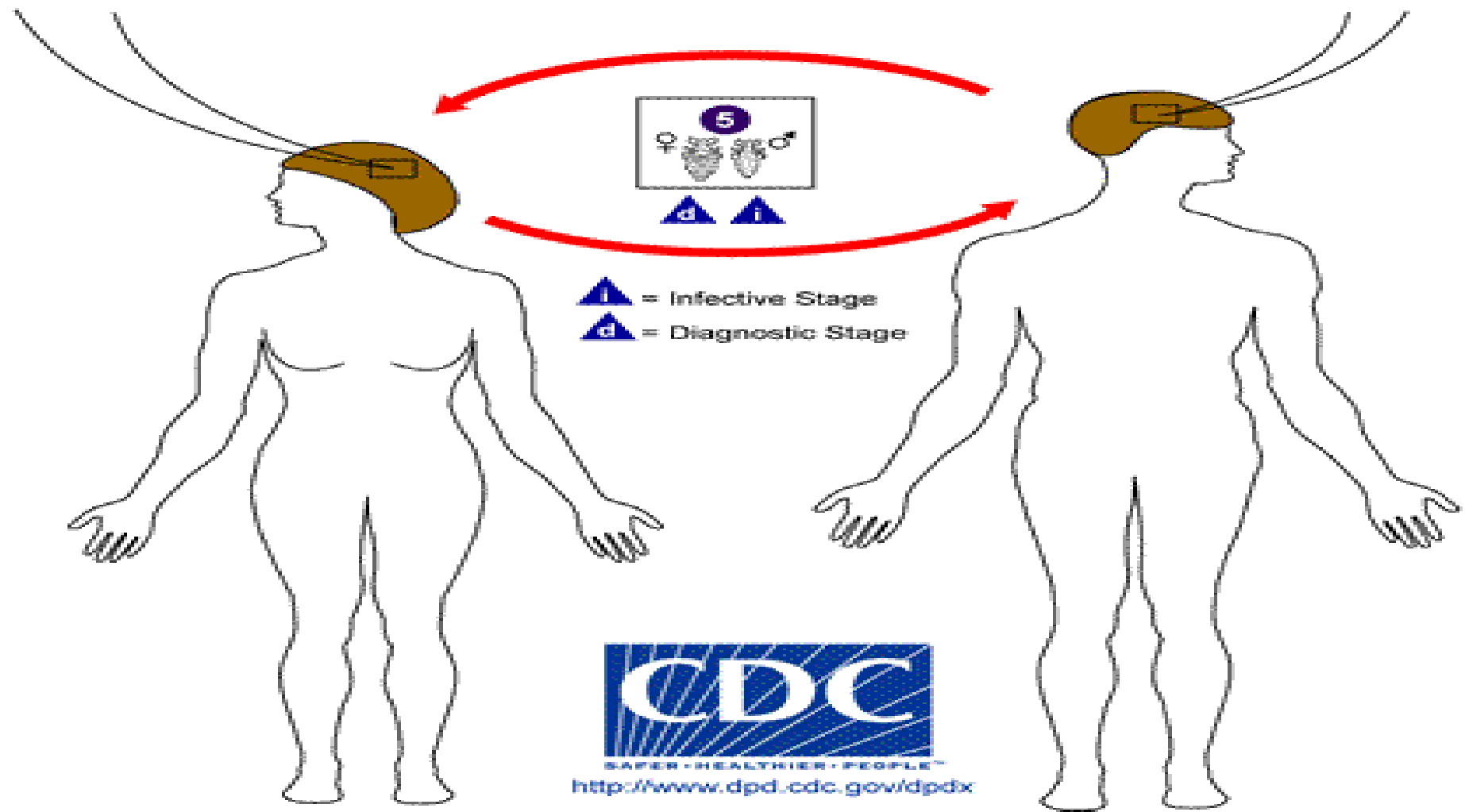
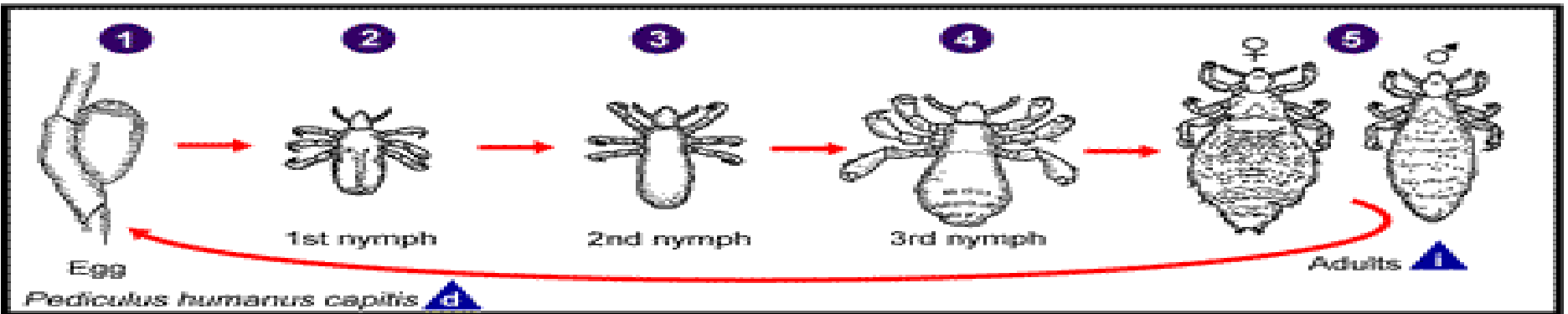
Hunting Lice by Candlelight Andries Both ca 1630





# NITS













# How to treat lice Gangnum Style



# LICE TREATMENT

## General Instructions:

- > Do not use conditioner before Rx
- > Apply pediculocide thoroughly
- > Do not wash hair for 24 hours
- > Repeat treatment after 7 to 9 days
- > Use a special comb several times a day
- > Place infested clothing, linens in plastic bag for several days.

# PEDICULOCIDES (OTC)

- ▶ Pyrethrins: safe for 2 years & above  
Kills adult lice. Not ovicidal  
Repeat after 7 – 9 days when  
eggs hatch
- ▶ 1% Permethrin Lotion: safe for 2 mos  
Repeat application



# PEDICULOCIDES (PRESCRIPTION)

- ▶ 0.5% Malathion lotion: use for children 6 years and above
  - ▶ flammable
  - ▶ may sting and irritate
  - ▶ an ovicide – one treatment maybe enough

# PEDICULOCIDES (PRESCRIPTION)

## What's New?

- 5% Benzyl alcohol – suffocates lice  
Safe for 6 mos. Must repeat.
- 0.5% Ivermectin cream for 10 minutes  
>95% cure rate - ovicidal
- ▶ 9% Spinosad suspension (an anti dog flea preparation) - ovicidal  
>85% cure rate



LICE MEISTER  
(SUYOD)

SUMMON THE HAIRFORCE 020 7485 7351

[help@thehairforce.co.uk](mailto:help@thehairforce.co.uk)

MR. LICE BUSTER















# GLOBAL SWARMING



# COMMON WORDS

▶ LOUSY

▶ NITPICKING

**Subject: Mass Murder**

**Source: PHILIPPINE STAR Aug 6, 2012 “SKETCHES”**

**Column of Ana Marie Pamintuan**

**Debate at the Senate Session Hall re - RH BILL**

**ENRILE: Sperm by itself has life! By destroying it, you already kill life itself.**

**MIRIAM: Following that line of argument, every time a man masturbates, he commits Mass Murder!**

# SUMMARY: INFESTATIONS

- ▶ Creeping eruptions: larvae of cat or dog hookworm penetrating skin and causing serpiginous lesions. Thiabendazole for Rx
- ▶ Scabies: adult female mite infective agent; highly contagious, treat entire house hold. Pyrethrins for Rx
- ▶ Lice: only head lice is important. Pyrethrins for Rx



Maraming Thank You