

# MIRACLE Academy

قال تعالى (يَرْفَعُ اللَّهُ الَّذِينَ آمَنُوا مِنْكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ دَرَجَاتٍ)

تفريغ OTC  
زميلتكم أنفال النعيمات



لجان الدفعات

# Head lice

## Non-Prescription Drugs and Parapharmaceuticals

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# Head lice

”ممك يعيب مناطق أخرى في الجسم“

- Is a common condition caused by infestation of the hair and scalp by *Pediculus humanus capitis* (the head <sup>قملته وحدة</sup> louse). "Lice: مجموعة"

- ✓ It lives and reproduce on your head
- ✓ Head lice feed on blood from your scalp
- ✓ Head Lice are a common disturbance, and are **not** considered a health hazard

سبب حدوثه قملته نفاقتة أو فردية بين الأطفال  
في المدارس

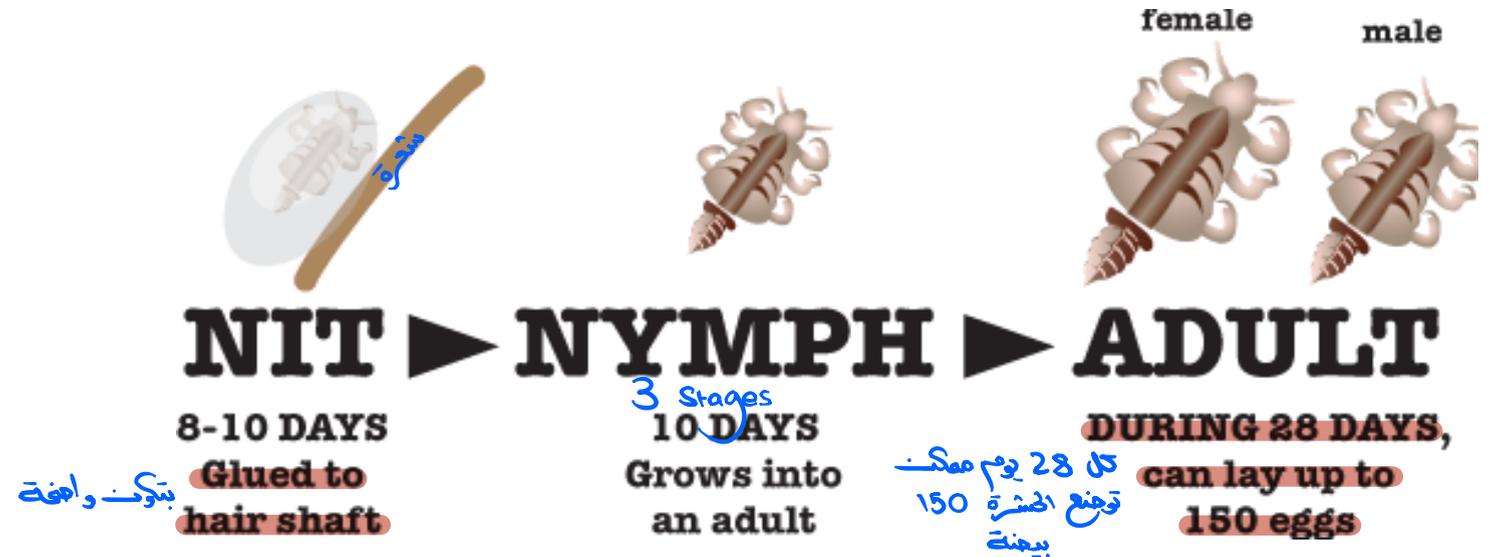
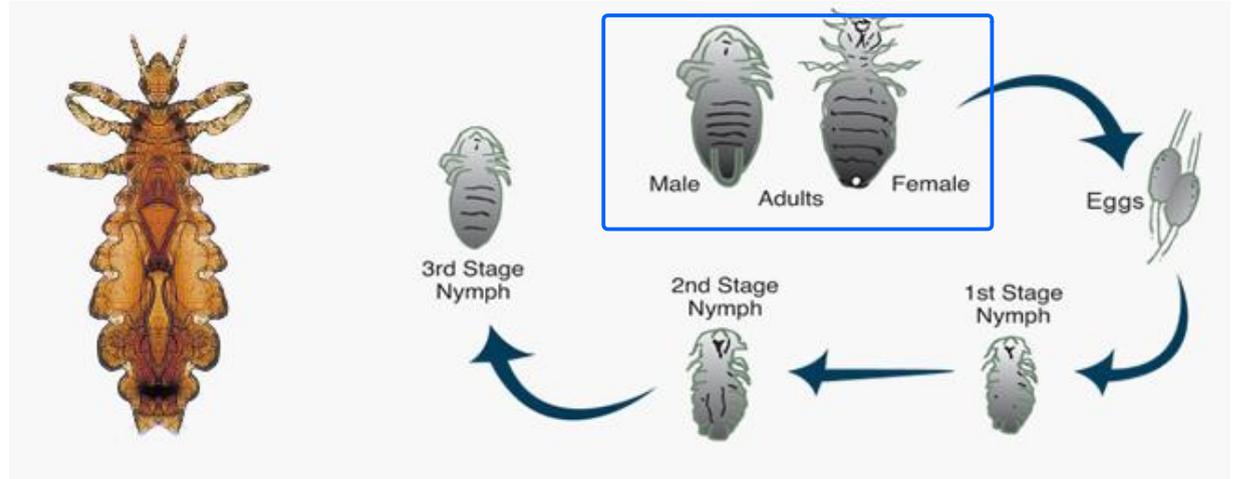
!! إذا كان بفرولة الرأس معظمه زي القشرة رح يكون مصاحبه حكه بس مش شرط، يعني ممكن يكون عنده قمل ومافي حكه !!

# Life Cycle

- Eggs "NIT"

- Nymphs <sup>برقعة</sup>

- Adults



# Transmission

- Person-to-person transmission (direct contact). **Must transmit live adult louse**
- Adult lice transferred when personal objects are shared: combs, brushes, hats



القمل لا يطير ولا يقفز من شخص لآخر؛ القمل يزحف فقط لذلك ينتقل فقط عن طريق الاتصال المباشر !

## What you need to know-Age

- Head lice infection is **most commonly found in children**, particularly around 4–11 years old
- Girls>boys
- Adult women occasionally infected
- lice infection is rare in adult men

**Inspection** for head lice = visual examination of the scalp and hair to detect lice or eggs.

# What you need to know-Checking for infection

1

"2 ways"

- Wet **combing** is the reliable method.

using a fine-toothed comb (tooth spacing

of  $<0.3\text{ mm}$ ). The hair should be damp or wet.

- The hair at the nape of the neck and behind the ears should be thoroughly checked.

بنمشط الشعر باستخدام المشط المخصص بعدئذ ينمسه على فائنه بيغناه بينه يتحرك  
واهلنا اذا كانت يتحرك الى inspection بوقت بالvisual يعف بوقت حجمه كبير وشايفينه بالعين  
المبرده "مش يون" ← عطيت النقيش في عطيت علاجية للتخلص من القمل



## What you need to know-itching

على النقيض من المعتقد العام

- Contrary to popular belief, itching is not experienced by everyone with a head lice infection.
- it may take weeks for itching to develop.
- The absence of itching does not mean that infection has not occurred.

### In addition to itching:

1. a tickling feeling of something moving on your head.
2. sores that develop from scratching itches.
3. irritability.
4. difficulty sleeping.

من شدة الحكة يجرح  
خزوة الرأس وبالغالب  
لما نستخدم أيب شامبو  
تعمله irritation

## Steps to Lice Eradication

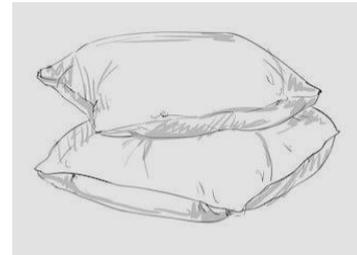
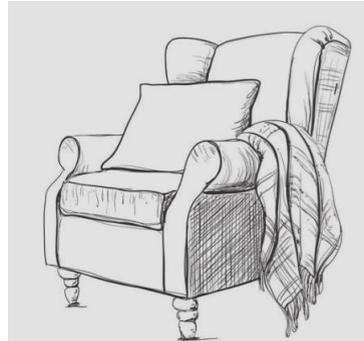
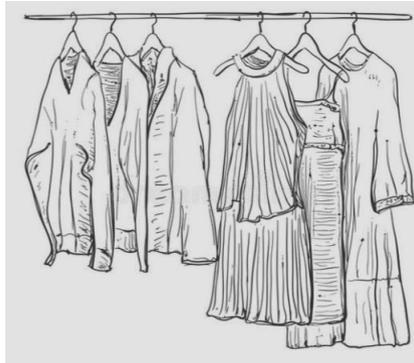
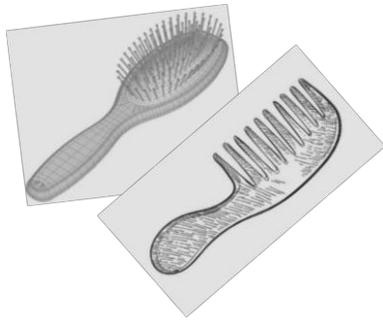
- **Prevention:** <sup>سواء بالمدرسة أو المنزل</sup> Inspect frequently.
- **Treatment:** May include use of lice killing shampoo.
- **Treatment of Belongings:** <sup>لازوم بشكل يوجب تغيير وكهات الملابس</sup> Wash bedding and clothing in hot soapy water. Dry using “high heat” cycle.
- **Post-treatment Inspection:** Inspect individuals up to 10<sup>\*</sup> days following treatment and at **4-6<sup>\*\*</sup> Weeks**

\*: في خلال 10 أيام من العلاج — للتأكد من عدم بقاء أي قمل أو بيض قد فقس بعد العلاج

\*\* : بعد 4 إلى 6 أسابيع — للتأكد من أن الشخص لم يُصاب بالقمل مرة أخرى

## Nonpharmacological Therapy

- ✓ Combing with nit comb
- ✓ Clothing and bedding should be washed in hot water and dried
- ✓ Hair brushes and combs should be washed in very hot water
- ✓ Carpets and furniture should be vacuumed



# Management

- ✓ Physical insecticides
- ✓ Wet combing ('Bug Busting')<sup>تدقیب</sup>
- ✓ Chemical insecticides
- ✓ Complementary therapies<sup>ماج فک-دنجا</sup> Coconut oil / کانر

# Physical insecticides

- 'first line' as they have few adverse effects, and lice do not develop resistance to them.

- مثلاً إذا اجت أم بتحكي انه استخدمت الشامبو بالشكل الصحيح وبالطريقة الصحيحة ورجعت كررته بعد اليوم التاسع ( المفروض يكرر بعد اليوم التاسع أو العاشر ) ويتعمل كل ال non pharmacological treatments الي ذكرناهم فوق ومع ذلك مافي أي تحسن هون غالباً صار في resistance ضده.

- MOA: physically coating their surfaces (*dimeticone* does this) or dissolving the wax coating of the louse and causing death by dehydration.

# Physical insecticides

- *Dimeticone products (lotions and sprays)* apply to dry hair, left on for 8 (or overnight) and washed out with shampoo.
- ✓ usually repeated 7 days later
- ✓ Cause irritation if it gets into the eyes
- *Isopropyl myristate/cyclomethicone solution*, applied to dry hair and washed out after 10 min



# Chemical insecticides - Permethrin

- ✓ Well-tolerated and inexpensive treatments.
- ✓ The product is applied to damp hair that is first shampooed with a non-conditioning shampoo and then towel dried.
- ✓ The hair should be thoroughly saturated with undiluted permethrin (25-30 mL) , which should **remain on the hair for 10 min. then rinsed.**
- This is (not) now generally recommended because of its short contact time and resistant rate is high



عادةً بعد استخدام الشامبو بنحكي للأُم تعمل wet combing باستخدام المشط المخصص مشان القمل أو البيض الى صارله destruction or killing نتخلص منه عن طريق التمشيط ( بعض ال chemicals بتعمل damaging للبيوض وهاد اشئ كثير منيح لأنه ما بنعطيها مجال تفقس وتتحول ل adult )

# Permethrin

- However, conditioners and silicone-based additives present in almost all currently available shampoos <sup>(1)</sup> impair permethrin adherence to the hair shaft and <sup>(2)</sup> reduce its residual effect.
- Although many repeat the application sometime between day 7 to 10 after treatment if live lice are seen, new evidence based on the life cycle of lice suggests that retreatment at day 9 is optimal.

Retreatment is  
- at day 9 -  
Very important

1. البيرميثرين يقتل القمل الحي، لكنه لا يقتل البيوض (الصئبان) بشكل فعال دائماً.  
2. البيوض تفقس عادة خلال 7 إلى 10 أيام بعد وضعها.  
3. إذا بقيت بعض البيوض حية بعد العلاج الأول، فإنها قد تفقس بعد اليوم السابع.  
4. القمل الذي يفقس يمكن أن ينضج خلال 8-9 أيام ويبدأ بوضع بيض جديد

إعادة العلاج في اليوم التاسع تمنع استمرار دورة حياة القمل، وتقلل فرصة الإصابة من جديد، وهي أفضل من مجرد اختيار يوم عشوائي بين اليوم 7 و10

# Adverse effects

another chemical insecticide  
Pyrethrins



Irritation and itching

Permethrin



Irritation and burning



Contact with eye and mucous membrane should be avoided



Should not be used in children younger than 2 years



In pregnancy and breastfeeding, pyrethrin is considered the choice of treatment, but medical consultation should be indicated before self-treatment

شُرحت بس المكتوب !

# Prescription Medications

## 1. Malathion lotion 0.5%;

Brand name product: Ovide\*

هاد كان موجود ولكن بسبب ال side effects بطل، هو من ال organophosphate كان بدون وصفة طبية بعدين بوصفة وحالياً بالأردن مش موجود، لكن للأسف موجود عند بعض العطارين ولسا يعطوه لأي حد بشكي من القمل، واحنا بنعرف كونه ال organophosphate ال solubility اله عالية جداً وإذا تم استخدامه بطريقة خاطئه رح يصيرله امتصاص even through the scalp وفي طفله ماتت من وراه.

Malathion is an organophosphate. Malathion lotion 0.5% is approved by the FDA for the treatment of head lice. The formulation of malathion approved in the United States for the treatment of head lice is a lotion that is safe and effective when used as directed. Malathion is pediculicidal (kills live lice) and partially ovicidal (kills some lice eggs). A second treatment is recommended if live lice still are present 7-9 days after treatment. Malathion is intended for use on persons 6 years of age and older. Malathion can be irritating to the skin and scalp; contact with the eyes should be avoided. Malathion lotion is flammable; do not smoke or use electrical heat sources, including hair dryers, curlers, and curling or flat irons, when applying malathion lotion and while the hair is wet.



\* Could be aqueous based  
or alcohol based :  
alcohol based: flammable  
"ever hair dryer should  
be avoided"

## How to use malathion

- Be sure to keep your eyes closed during this treatment. You may need to have an adult help you apply the lotion.
- **Apply malathion lotion to dry hair and scalp area paying special attention to area behind your ears and at the back of your neck.** Be sure to use enough lotion to cover the entire scalp area and hair thoroughly.
- Allow hair to air dry and to remain uncovered.
- ✓ Malathion lotion is flammable. The **lotion and wet hair should not be exposed to open flames or electric heat sources, including hair dryers or curlers. Do not smoke while applying lotion or while hair is wet.**
- **Leave the lotion on your hair and scalp for 8 to 12 hours.**
- After 8 to 12 hours have passed, **shampoo your hair and scalp with warm water in a sink.** You should not use a shower or bathtub to rinse the lotion away because you do not want to get the lotion over the rest of your body.
- You and anyone who helped you apply the lotion should **wash your hands carefully after the application and rinsing steps.**
- Use a lice comb to remove the dead lice and nits (empty egg shells) after this treatment. You may also need to have an adult help you to do this.
- If you see live lice on your head 7 to 9 days after treatment, repeat this entire process.

### Recommendations:

الأفضل أن تكون لابس gloves، غسل الشعر يكون على ال sink ونحكي للطفل ينزل راسه لأني ما بدي ينزل على جسمه وكمان استخدام المشط مشان نشيل القمل الميت ونعيد ال treatment بعد 7-9 أيام.

# Causes of treatment failure in pediculosis

إذا ماخى أبى قسنب شو بتوتقوا ؟

- Misdiagnosis

- ✓ ماخى الفترام أو هف ما استخدمت  
• Noncompliance

- Failure to follow instructions correctly

- ✓ Inadequate quantity of pediculicide applied

- Reinfestation

- ✓ Resistance

يعف الدم عالجى شعر  
بنتها ورجعت عالهدرسى  
وعف الهدرسى رجعت أخذت  
الدوى .

## HINTS AND TIPS BOX 10.1: HEAD LICE

Who to treat?

Only those individuals with an active head lice infestation should be treated.

Products for prevention

No credible evidence exists for any product marketed for prevention. The patient and/or parent should be counselled on when treatment is required. *Frequent inspection is very important in order to prevent it.*

Treatment failure?

It is recommended that detection combing be performed after any treatment to confirm head lice eradication.

For wet combing: Wet combing should be continued if necessary until no full-grown lice have been seen for three consecutive sessions.

For insecticides, dimeticone and isopropyl myristate: Perform detection combing (wet or dry) 2–3 days after completing treatment. If no adult or nymph lice are found, repeat detection, combing 8–10 days after treatment. Treatment is successful if no lice are found in both detection combing sessions after treatment.

Myths

Public misconceptions about head lice need to be dispelled.

Head lice are not only associated with dirty hair.

Head lice do not only affect children.

Children should not be kept from attending school.

”خزانات”

ما حكت اشي عنهم

## Head lice myths

من (1-8) عبارة عن "حقائق"

- **The following additional facts may reassure and inform patients and parents of patients.:**

1. No significant difference in incidence occurs among the various socioeconomic classes or races. ← فرق، فقير أي حد ممكن يصاب فيه.
2. Hygiene and hair length are **not** contributing factors. ← ممكن عدد والى شعيرهم تغير يهابوا فيه عادي.
3. Head lice **do not** fly or jump from person to person.
4. Head lice **do not** carry other diseases.
5. The head does not have to be shaved to get rid of lice.
6. Washing hair with "brown" soap is not effective.
7. Hair does not fall out as a consequence of infestation. ← لا يسبب ساقط الشعر.
8. Head lice infestations can occur at any time of the year. ← يمكن أن يحدث في أي وقت من السنة.