

**In the Name of GOD**

# **Cutaneous leishmaniasis**

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# 2 type of treatment

## Systemic

Meglumine antimonate  
(Glucantime)

I.M, at once, 20mg/kg/day  
Each cc= 85mg  
Each 20kg = one injection  
Maximum, 3 injection

CI = 21 consecutive days  
VI= 28 consecutive days

Sodium Stibogluconate  
Pentostam 100 mg/ml  
Each cc= 100mg

one week after systemic treatment

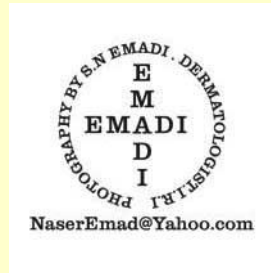
## Localize

Crayo  
2mm more  
than lesion

Once or twice  
a week for 6 weeks  
First crayo then injection

Localaize  
injection of G

Intradermal  
Bleaching  
painful



Crayotherapy alone for the lesions on acral area might be harmful

# *Most lesions usually have 3 parts:*

## **1- Crust or necrotic space at the surface of center**

*due to dry exodus , dead cell & parasites*

## **2-Granulation tissue at the base of center lesion**

*causes the scar after healing*

## **3- Erythema at periphery of lesion**

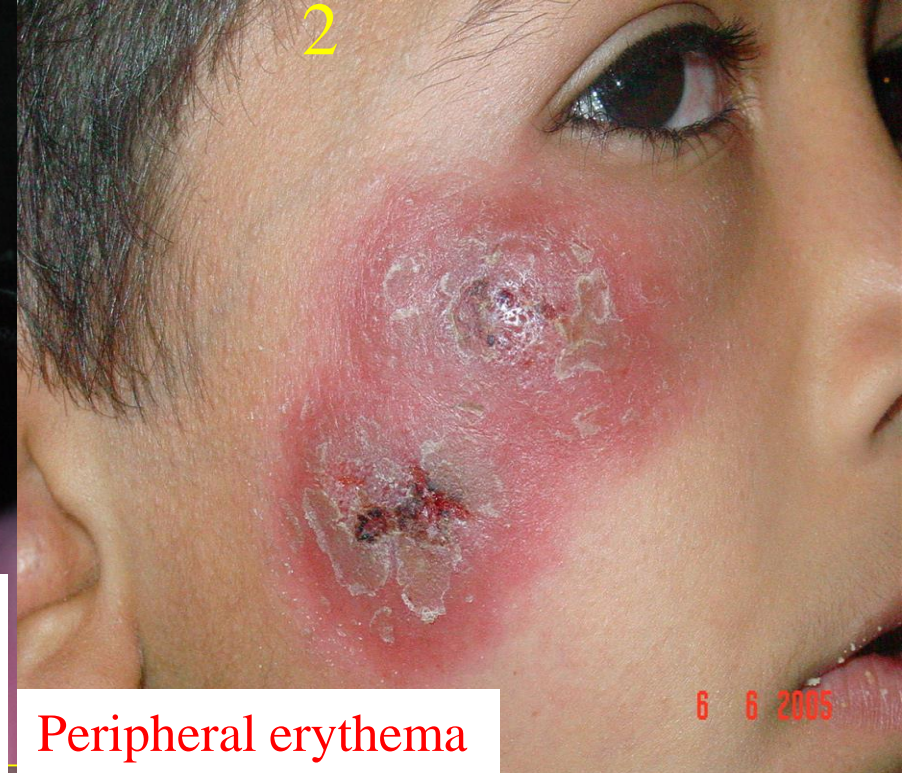
*contains active parasites that can be able to expand*



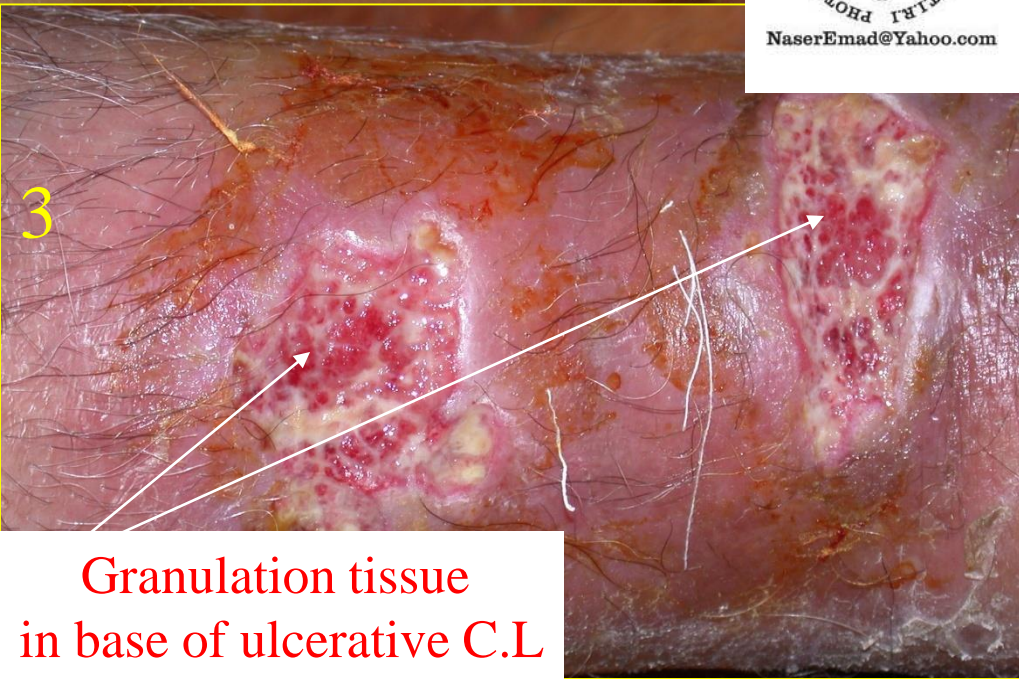




**Crust on C.L**



**Peripheral erythema**



**Granulation tissue  
in base of ulcerative C.L**



**Peripheral erythema & central crust**



# Why local injection by Triamcnenolone - Glucantime 1:20?

## *Previous studies show*

- Cause & severity of C.L is combination of:

- ( a ) Infectivity of parasites in all patients
- ( b ) High activity of immune cell systems in some patients

**Example:** *M.L & Old L.C.L are initially inflammatory with infiltration of lymphocytes , histiocytes but few parasites even the other name for C.L is macrophage disease.*

**So severe and persistent inflammation can produced big & permanent Scars**

## *Therefore*

- our treatment strategy is :

- ( a ) *Kill the parasites by Glucantime*
- ( b ) *Reduce the scar due to decreased inflammation by **Triamcnenolone***



# How cryotherapy & local injection by Triamcnenolone-Glucantim 1:20?

- 1- we chose a patient with up to 3 lesions and diameter less than 2cm
- 2- **Combination therapy with Crayotherapy is better started after 3rd injection**
- 3- **Crayo should be done before INJ because:**
  - (a) it causes mild Anesthesia in the injection site
  - (b) Crayo after INJ may reduce the effect of INJ Glucantime due to freezing(-1)
- 4- **Before INJ compare the length of needle with the INJ site (lesion)**
- 5- The insertion site should be one from periphery to center, needle can be rotated inside the lesion without removing . For more insertions needle must be changed to prevent incubatio
- 6 - **Leishmania parasites infect the dermis**  
**SO Best INJ is intradermal & periphery of lesion**
- 7- Low pressure in fragile tissue in the center of lesion can slowly absorb Glucantime from periphery without leaking **SO** no need for direct INJ in center lesion.
- 8- **Confirmation of intradermal INJ signs are**
  - (a) Hardening
  - (b) pain
  - (c) bleaching during INJ
- 9- Injection process twice a week for 6 weeks







**Cryotherapy**

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Erythema border and safe skin  
between two blue circles is  
Target site for INJ



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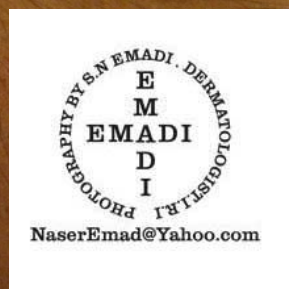
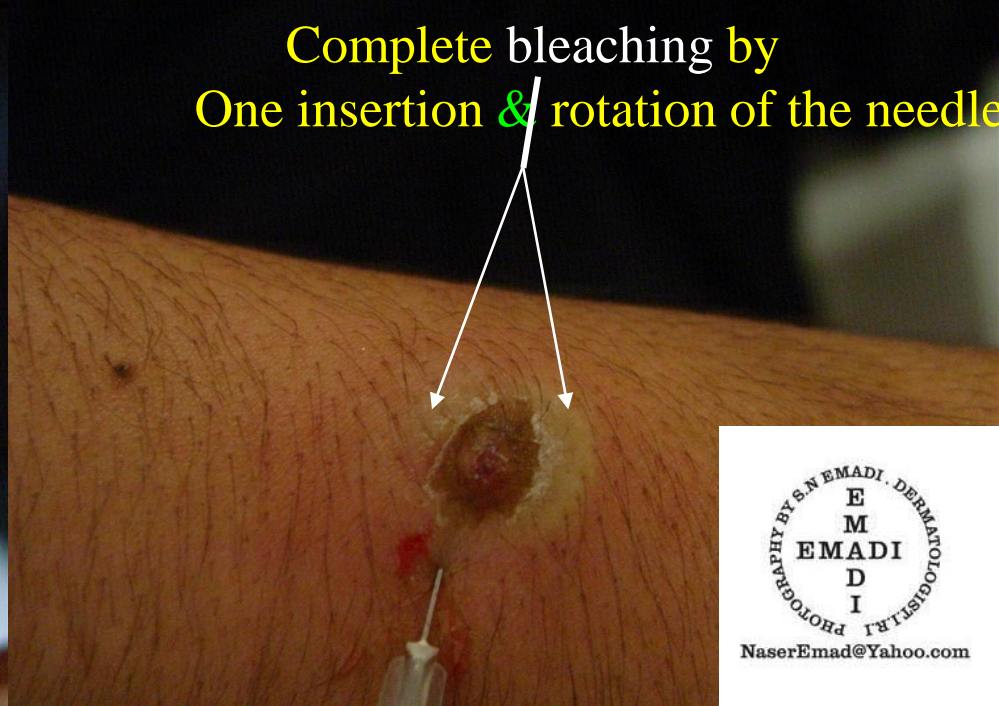
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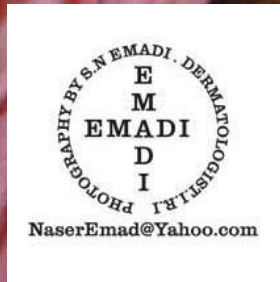
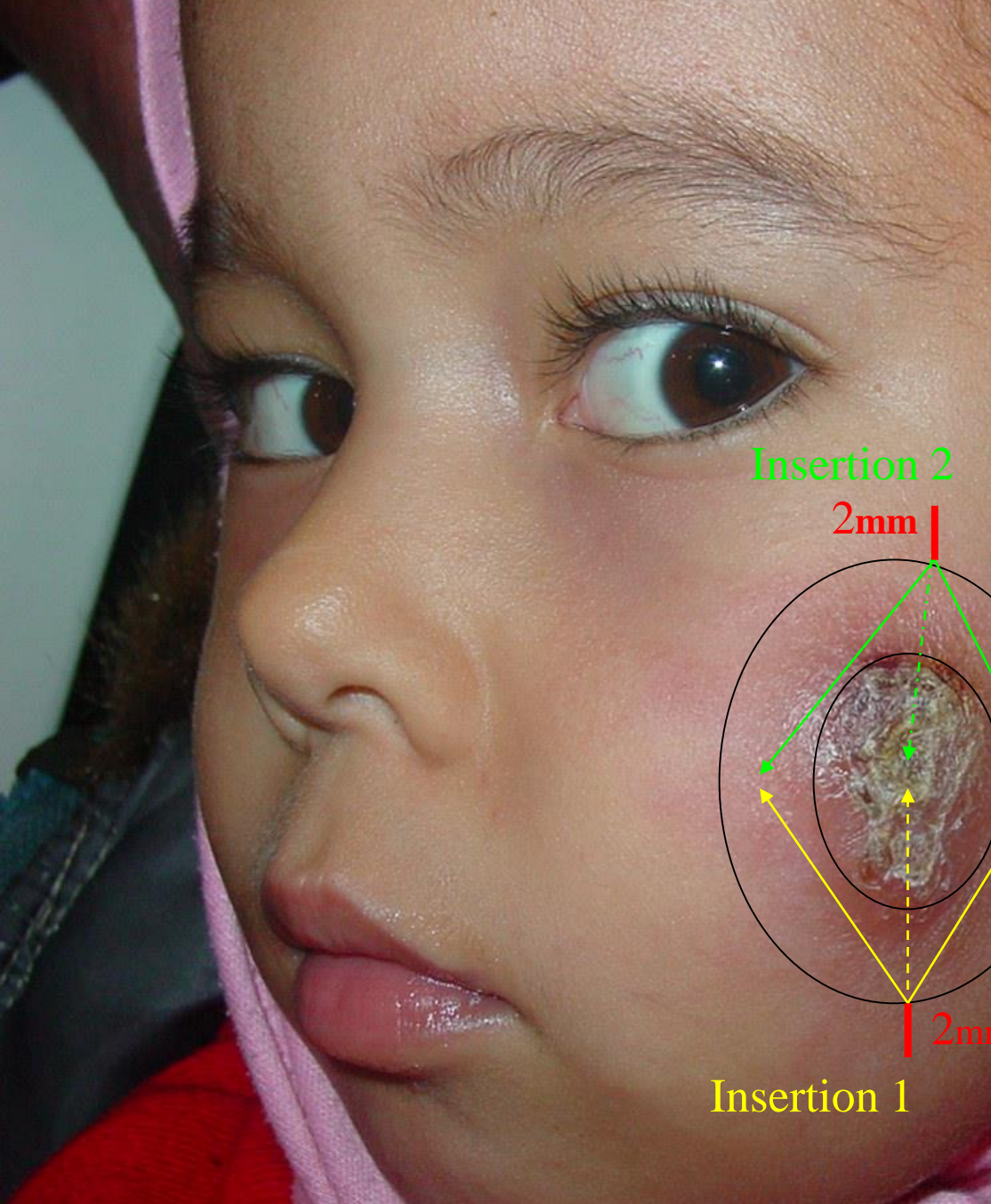
Comparison between  
the length of needle & lesion  
To determine number & site of insertions



Complete bleaching by  
One insertion & rotation of the needle





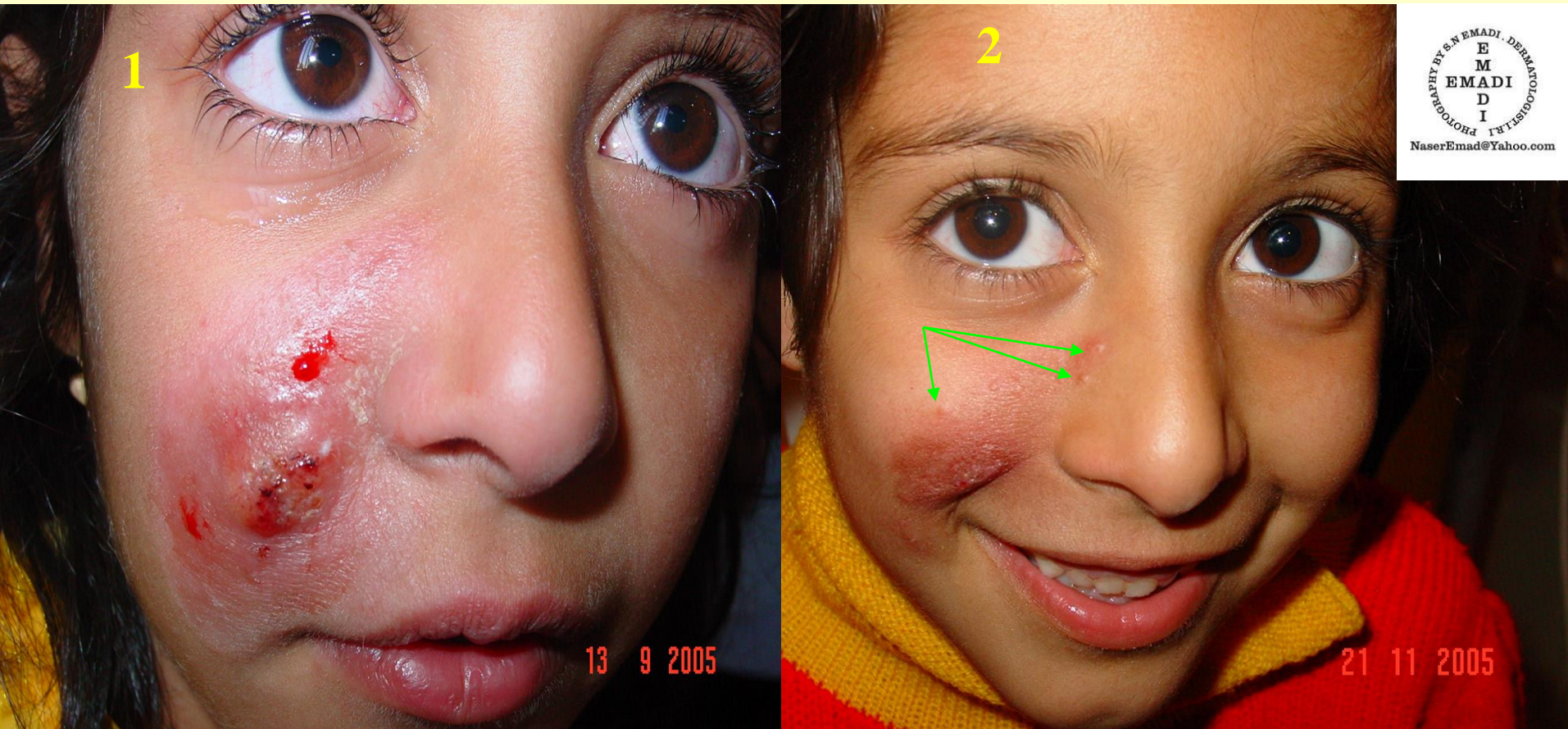


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Removing of the needle for rotation supposed to be done up to 2mm before insertion point

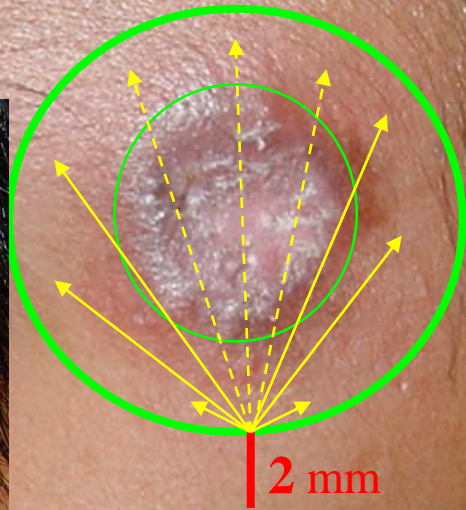
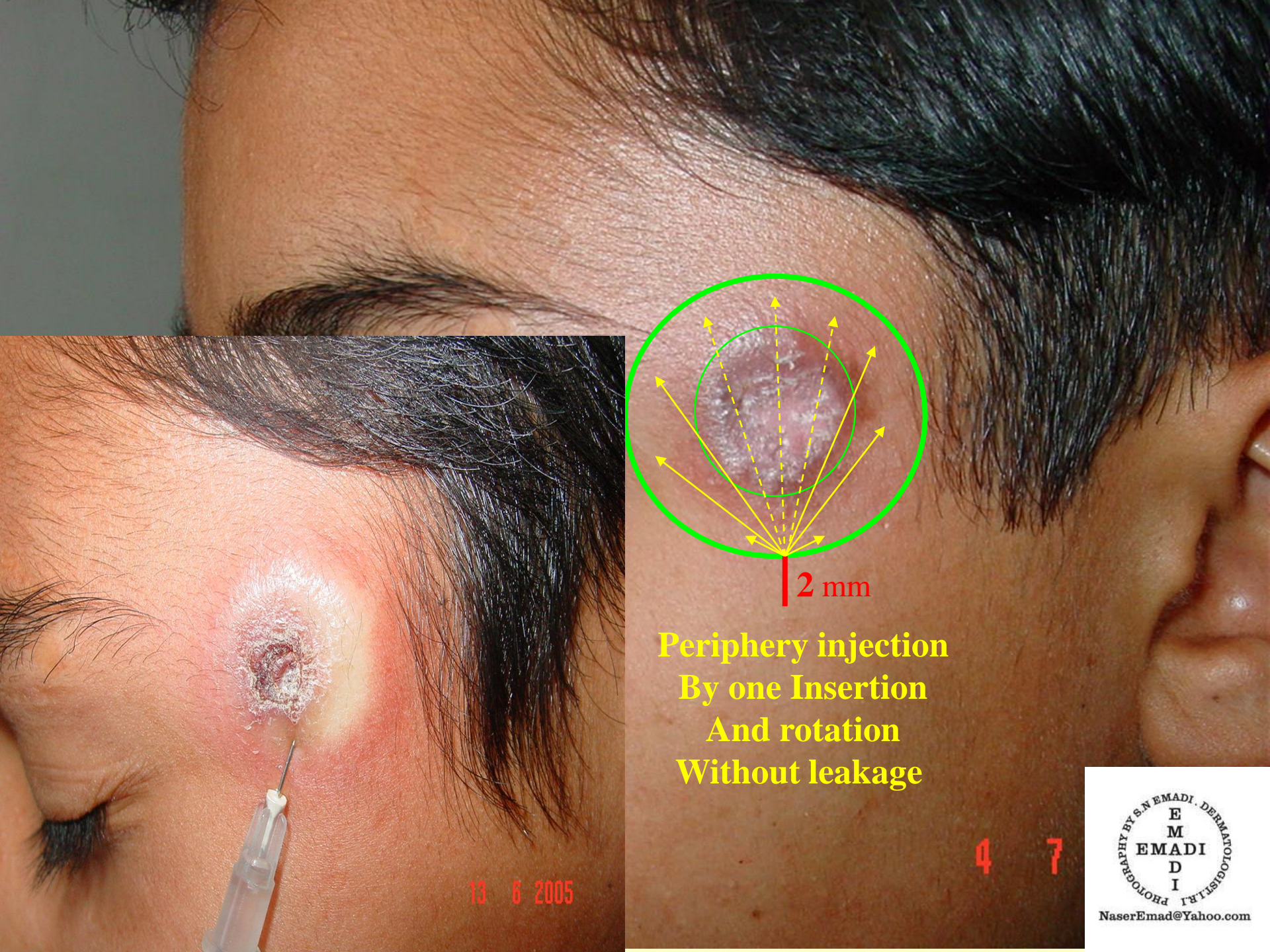


# Why should the needle be changed after the first insertion?



Cause of the unexpected Small papules (**fig 2**) after 2months of treatment in periphery may be related to incubation & transfer Of leishmania by contaminated tip of needle from the **first insertion** to **second or more insertions** because the **needle was not changed**.





**Periphery injection  
By one Insertion  
And rotation  
Without leakage**

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Periphery & rotation of injection  
By one insertion  
Without leakage



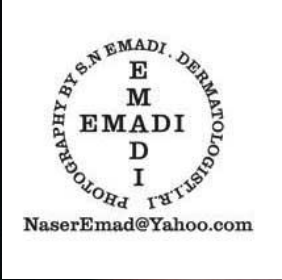
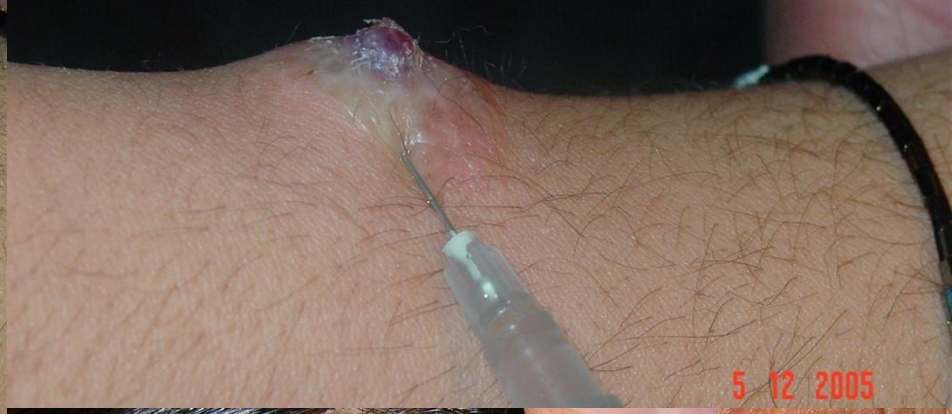
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3



Dermal & hypodermal injection

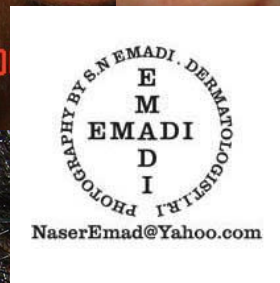
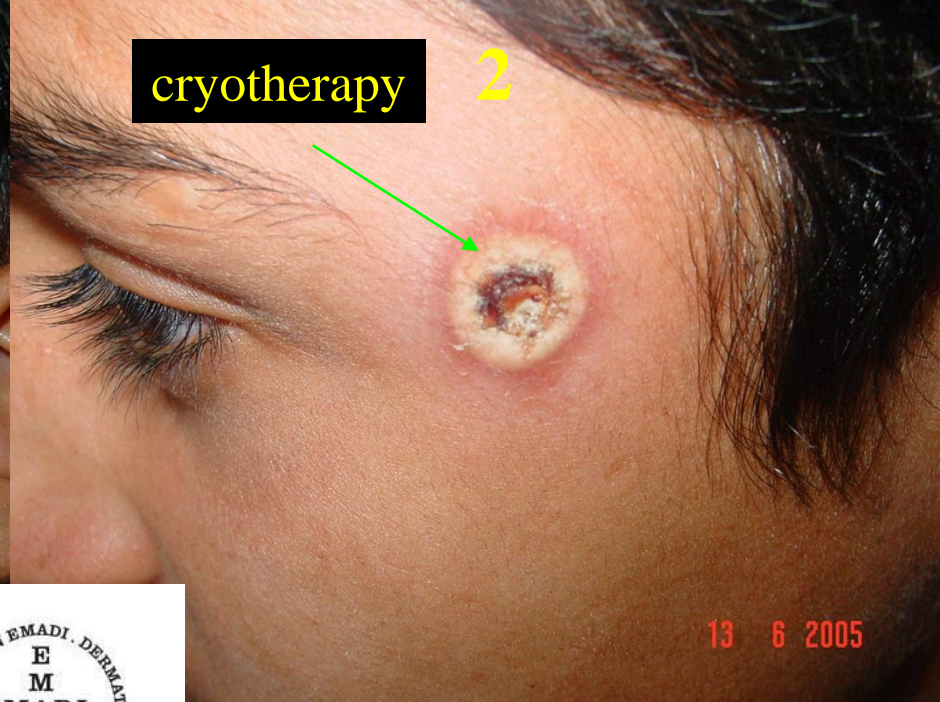
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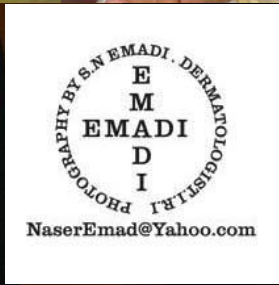
















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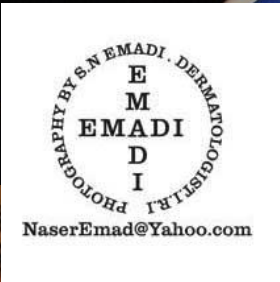
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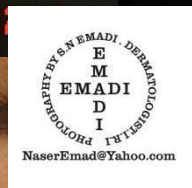




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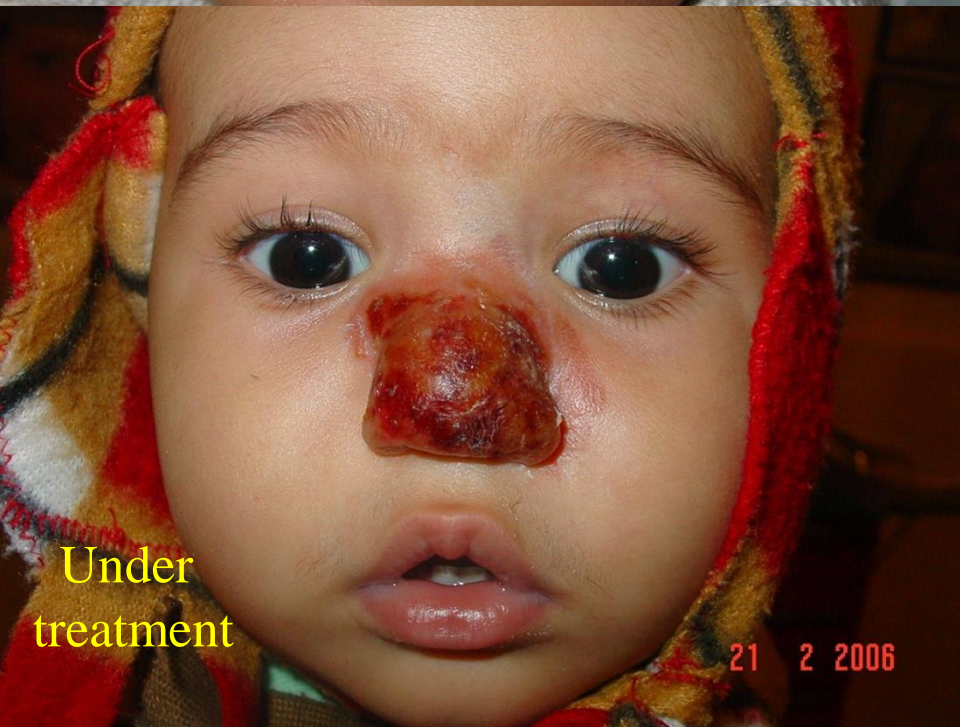




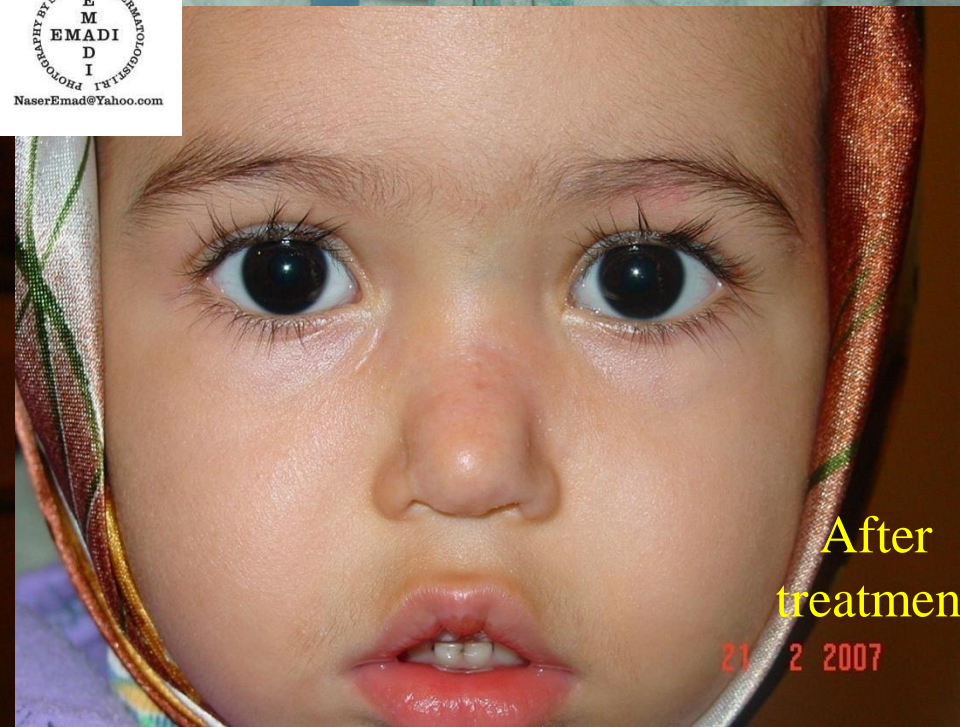
Primary lesion



Progressive lesion

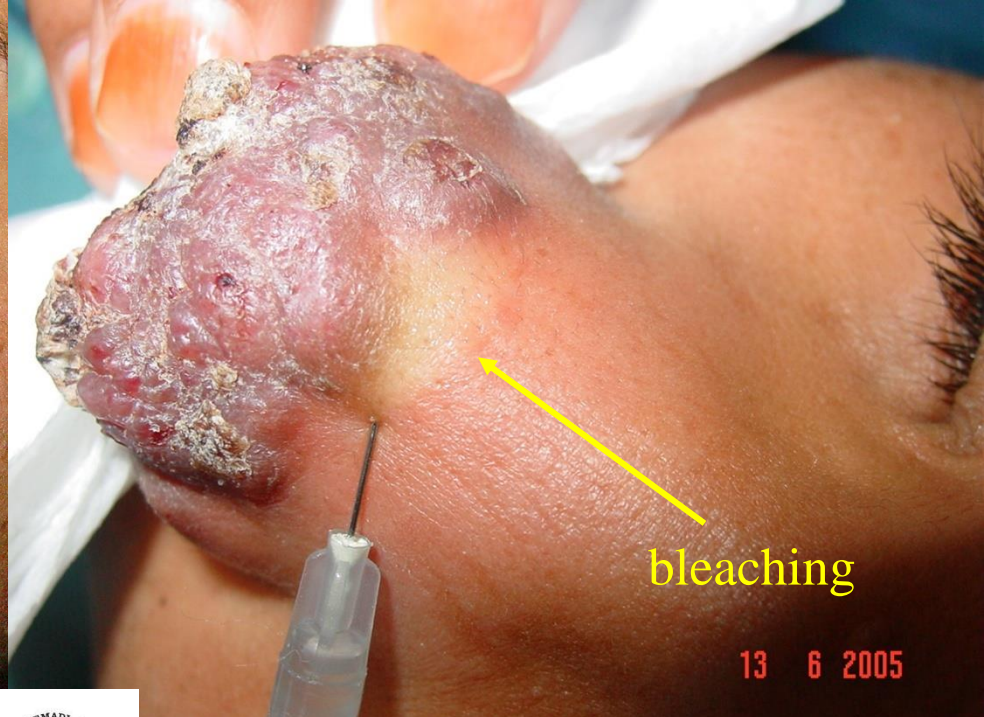


Under treatment



After treatment









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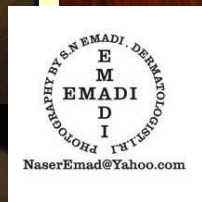




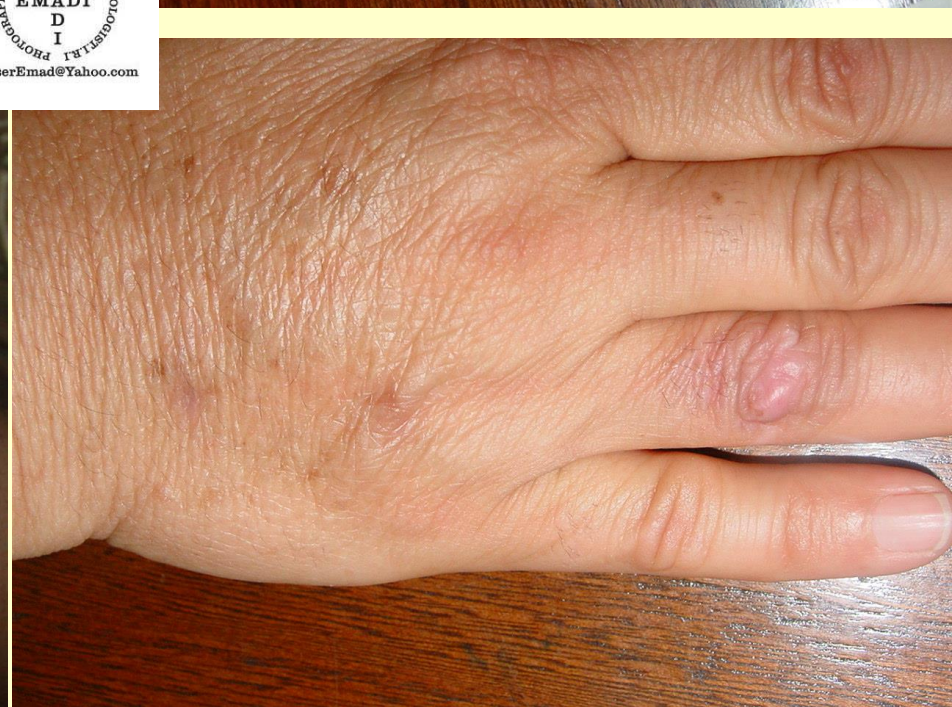
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Thank you for your attention

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