TOPICAL TREATMENT WITH ANTIBIOTICS

EXPERIENCE AT ALLADA
PLAN

- REMINDER OF THE AIMS OF TREATMENT WITH ANTIBIOTICS
- METHOD USED FOR DOCUMENTATION
- SUMMARY OF ACTIVITIES CARRIED OUT AT ALLADA
- SUCCESSES
- FAILURES
- DIFFICULTIES
- PROSPECTS
AIMS OF TREATMENT WITH ANTIBIOTICS

■ CATEGORY 1:
  ■ To cure lesions without the need for surgery or to reduce surgery to a minimum

■ CATEGORY 2:
  ■ To reduce the scale of the surgical operation

■ CATEGORY 3:
  ■ To control the M. ulcerans infection before the operation
DOCUMENTATION

- ADMISSION
  - MEASUREMENT + SWAB + PHOTOGRAPHY

- W2
  - MEASUREMENT + PHOTOGRAPHY

- W4
  - BIOPSY + PHOTOGRAPHY

- W6
  - PHOTOGRAPHY

- NB: from W4 onwards, several situations are presented:
  - Satisfactory evolution ➔ continue with ATB without surgery and with documentation as in W2
  - Ambivalent, unsatisfactory or stationary evolution, ➔ Surgery ➔ measurement hard to interpret ➔ documentation as in W6
<table>
<thead>
<tr>
<th>MONTH</th>
<th>Number of patients</th>
<th>Operated at (w_0)</th>
<th>Complied with protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat 1</td>
<td>21</td>
<td>1 (5%)</td>
<td>20 (95%)</td>
</tr>
<tr>
<td>Cat 2</td>
<td>62</td>
<td>17 (27%)</td>
<td>45 (73%)</td>
</tr>
<tr>
<td>Cat 3</td>
<td>6</td>
<td>2 (33%)</td>
<td>4 (67%)</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>20 (22%)</td>
<td>69 (78%)</td>
</tr>
<tr>
<td>MONTH</td>
<td>Complied with protocol</td>
<td>Operated at W4</td>
<td>Scarred without surgery</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------</td>
<td>-----------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Cat 1</td>
<td>20</td>
<td>13 (65%)</td>
<td>7 (35%)</td>
</tr>
<tr>
<td>Cat 2</td>
<td>45</td>
<td>35 (78%)</td>
<td>10 (22%)</td>
</tr>
<tr>
<td>Cat 3</td>
<td>4</td>
<td>4 (100%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td>52 (75%)</td>
<td>17 (25%)</td>
</tr>
</tbody>
</table>
## CDTUB ALLADA

<table>
<thead>
<tr>
<th>MONTH</th>
<th>Number of patients operated at W4</th>
<th>SURGICAL PROCEDURE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>EXCISION</td>
</tr>
<tr>
<td>Cat 1</td>
<td>13</td>
<td>4 (31%)</td>
</tr>
<tr>
<td>Cat 2</td>
<td>35</td>
<td>22 (63%)</td>
</tr>
<tr>
<td>Cat 3</td>
<td>4</td>
<td>1 (33%)</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>27 (52%)</td>
</tr>
</tbody>
</table>
Duration of hospital stay
- Median = 71 days

Period taken for scar to form after excision:
- Median = 32 days
CONCLUSIONS

 CATEGORY 1:
- Cure the lesions without the need for surgery (35%) or with minimum surgery (69%)

 CATEGORY 2:
- Reduce the scale of the surgical operation
  - \((10+11+2)/45 = 51\%\)

 CATEGORY 3:
- Control the \(M.\ ulcerans\) infection before surgery: RESULT TO BE DISCUSSED
SUCCESSES
Fabrice

Initial photograph
(23/02/05)
OEDEMA, ULCER AND MAJOR UNDERMINING
Fabrice

4th week: 21/03/05

- Oedema has disappeared
- Scarring has begun (formation of epidermal tissue around the edge)
Fabrice

- **6th week: 04/04/05**
  - NORMAL SKIN
  - SCARRING OF LESION ALMOST COMPLETE
- **8th week: 18/04/05**
  - SCARRED
Delphin

Admitted: 21/02/05
MEASUREMENT: 12/3
Delphin

- 2\textsuperscript{nd} week: 07/03/05
  - MEASUREMENT: 11/3

- 4\textsuperscript{th} week: 28/03/05
  - MEASUREMENT: 9/4
Delphin

- **6th week: 04/04/05**
  - MEASUREMENT: 7/0.5

- **8th week: 18/04/05**
  - SCARRED
MICHELINE

- ONSET: 04/03/05
- MEASUREMENT: 5/3
MICHELINE

- **W2**: 18/03/05
  - MEASUREMENT : 5/3

- **W4**: 30/03/05
  - MEASUREMENT : 4/2
MICHELLINE

W6: 14/04/05
MEASUREMENT: 4/2
PLASTIC SURGERY OF EYELID

W8: 28/04/05
SCARRING WITH DISCRETE DROOPING OF EYELID
ALPHONSE

- ONSET: 10/03/05
- MESUREMENT: 4,5/3
ALPHONSE

- W2: 24/03/05
- MEASUREMENT: 4,5/3

W8: 04/05/05
MEASUREMENT: 3,5/1,5
DONALD

- **Age**: 12 years
- **Sex**: male
- **Date of admission**: 24/02/2005
- **Type of lesion**: ulcer
- **Site**: LLL+RUL
- **Initial measurement**: 16/12, 11/8.5cm
- **Cat**: 3 (Dissemination)
DONALD

ATB stopped at W8. Dressing continued
04/07/05: Scarring under way
DONALD

12/09/05

Scarring without surgery
DONALD

- 02/10/05

Follow-up 8 months later
MARCELLINE

- **Age**: 6 years
- **Sex**: female
- **Date of admission**: 24/02/2005
- **Type of lesion**: ulcer
- **Sites**: Dis.
- **Initial measurement**: 19/14cm et 16/12 cm
- **Cat**: 3
04/07/05
Scarring has begun
MARCELLINE

02/10/05
SERALIE

- **Age**: 10 years
- **Sex**: male
- **Date of admission**: 01/06/2005
- **Type of lesion**: ULCERATIVE PLAQUE
- **Site**: Abdomen
- **Initial measurement**: 13/7cm
- **Cat**: 2
SERALIE

- 29/06/05
  - Measurement W4: 11/3
- 25/08/05
  - Scarring at W8 + 1 week
ELIE

- **Age**: 12 years
- **Sex**: male
- **Date of admission**: 24/02/2005
- **Type of lesion**: ulcer
- **Site**: Abdomen
- **Initial measurement**: 16/8cm
- **Cat**: 2

04 07 05
Scarring without surgery
FAILURES ???
MARIETTE

- 34 years old
- 1st admitted to hospital on 16/11/04
- Origin: Ze centre
- Period before consultation: 1 year
- Initial lesions:
  - large ulcer of the left hemithorax
  - Osteomyelitis of the carpal bones
    - AFB ++ (23/11/04)
    - Culture (-)
MARIETTE

- Treatment immediately on admission:
  - Excision + graft of the thoracic lesion
  - Curettage of the bones of the carpal lesion
  - ABT

- Evolution
  - Satisfactory, with good, rapid scarring
  - Discharged on 12/02/05
MARIETTE

- Readmission on 11/04/05 for a plaque on the right knee with incipient ulceration
- AFB (-) CULTURE (-)
- Adoption of a new 8-week course of antibiotic treatment, with limited excision in W1 (15/04/05)
MARIETTE

- Rapid scarring, however, a new contiguous lesion appeared on 20/05/05; currently under AB treatment;

- Extensive complementary excision performed on 30/05/05; continuation of AB treatment until completion
MARIETTE

- Favourable evolution with controlled scarring (graft)
- Discharged on 29/08/05
ROBERT

- Age: 38 years
- Sex: M
- Address: Toffo
- Date of admission: 12/12/04
- Period before consultation: 6 months
- Initial lesion:
  - Ulcer on upper 1/3 of left leg
ROBERT

Treatment on admission

- Excision
- Graft
- ABT (19/01/05 to 21/03/05)
Evolution

- Scarring of initial lesion: 29/04/05
- However, readmitted on 23/05/05 for a new lesion on his left heel.
- Further course of ABT, followed by excision-graft at W2
Stationary evolution with delayed scarring, requiring an x-ray of the heel.

Detection of a geode in the heel bone: procedure followed:
- Curettage of bone: 30/08/05
ROBERT

Evolution (30/08/05):

Favourable. Scarring and discharge on 15/11/05
JONAS

- 08/09/05
- AGE: 4 years
- SEX: MALE
- CAT 2
- SITE: RLL
- INITIAL MEASUREMENT: 9/5
- AFB +
- ABT
JONAS

- **W2: 21/09/05**
  - Measurement: 9/5
  - Evolution: stationary

- **W6: 17/10/05**
  - Evolution: stationary
  - Nodule on the thigh
  - ➔ excision of both lesions
  - AFB +
JONAS

22/11/05 (W2 AFTER END OF ABT)

- NEW PLAQUE IN THE POSTERIOR KNEE HOLLOW ON THE SAME LIMB
- MEASUREMENT: 10/7
JONAS

- 22/11/05
  - PLAQUE
    - EXCISION + IMMEDIATE SUTURE
    - AFB (-)
JONAS

- 02/12/05 (W4 AFTER END OF ABT)
  - NODULE AT THE THIGH ROOT ON THE SAME LEG
  - EXCISION;
  - AFB (-)
JONAS

- 21/12/05
- LESIONS ALMOST COMPLETELY SCARRED
- PINCH GRAFT
Satisfactory evolution of ulcerative and non-ulcerative oedemas with considerable "reduction" ➔ limitation of the area to be excised

Plaques always develop into ulcers; persistence of dystrophic granular tissue which has to be excised

For the most part, cases of recurrence during or after RW were attributable to failure to comply with the protocol (operation before W4); in addition, AFB and culture negative

ARE THESE MERELY INFLAMMATORY REACTIONS ATTRIBUTABLE TO RESIDUAL TOXINS?

WHAT IS THE CORRECT PROCEDURE IN THESE CASES?
COMMENTS

- No major side-effects noted; occasional fainting, buzzing in the ears and hearing loss
- Longer hospital stay
- Decentralized case management is possible and accepted by the population fosters early case detection, integration of the peripheral health system into BU case management, lightens the burden on CDTUB
- With the exception of a number of recurrences reported during treatment or immediately after discharge, none of the patients treated in 2004 at W/R has been admitted with recurrence.
  - However, active case detection is required in this respect.
DIFFICULTIES

- Staff have some initial difficulties adjusting
- Case confirmation and laboratory follow-up:
  - What type of documentation is needed for non-ulcerative lesions?
    - Should we perform punch biopsy immediately on admission or after W1?
      - Is there a risk of iatrogenic dissemination???
    - Should we wait until W4 to perform biopsy during excision?
      - Is there a risk of increasing the likelihood of negative results???
  - Ulcerative lesions:
    - How far are results of swab and biopsy comparable? (SENSITIVITY? PPV? NPV?)
PROSPECTS

- Introduction of decentralized administration at Allada
  - Prerequisites:
    - Feasibility study
    - Selection of eligible centres
- Assessment of importance of ototoxic effects
  - Goal: to determine whether or not systematic monitoring of patients' hearing is necessary?
- Study of the acceptability of this treatment for the target groups.