



The implementation of injectable artesunate: *the experience of MSF*

Dr Martin De Smet
Coordinator MSF's Malaria Working Group

RBM Case Management Working Group, Geneva 2012

Outline presentation

- key points of MSF's policy on severe malaria
- tools to support and monitor the implementation of AS inj
- the organization of training & lessons learnt
- the status of roll-out of AS inj. in MSF
- first results of the monitoring
- lessons learnt & conclusions

MSF's severe malaria policy (2011)

The treatment of choice for severe malaria is based on the use of injectable artesunate (AS).

- (...) artesunate injections (IV, or IM when the IV route is not feasible or would significantly delay the administration) are the treatment of choice.
- artemether IM can still be used in places where the use of AS is not feasible (...)
- Having both ATM and AS injections at the project site should be avoided to prevent erroneous IV injection of ATM

MSF's severe malaria policy (2)

- in case the treatment has been initiated externally with quinine (...) this treatment should be continued with AS injections.
- also pregnant women with severe malaria are to be treated with artesunate injections, including during the first trimester, (...) – *it has to be noted that the risk/benefit balance here is different from uncomplicated malaria in pregnancy.*
- the treatment of severe non-falciparum cases should be the same as for severe Pf cases.

MSF's severe malaria policy (3)

Pre-referral treatment

- Depending on the capacity of the personnel, use rectal artesunate, IM artemether or artesunate (IM or IV) to initiate the treatment before transfer to a facility equipped to treat severe malaria.

Tools

- Technical guidance
- Awareness/lobby
 - "making the switch"
 - with WHO, MMV: stakeholders meeting report
- Monitoring sheet



**THE ADMINISTRATION OF ARTESUNATE INJECTIONS (Artesun®)
PRACTICAL ASPECTS**

Malaria Working Group, 16.03.2011

- Packaging
- Dosage
- Administration routes
- Technique IV administration
- Technique IM administration
- Notes: esp. avoid having ATM and AS in same mission)



MAKING THE SWITCH

Ensuring access to improved treatment for severe malaria in Africa



Saving more lives with artesunate injection

Injectable Artesunate Stakeholders' Meeting Report
Geneva, 11 November 2011



Training organized in MSF for expatriate and national staff/supervisors

- 1 hour **presentation** on severe malaria for supervisors, followed by Q & A
 - ✓ why AS inj ?
 - ✓ how to administer ?
 - ✓ specific cases (pregnancy, ...)
 - 1/2 hour **practical exercise** in small groups (4-5)
 - ✓ prepare solution (clear solution, need evacuate air before adding physiologic,...)
 - ✓ discuss potential problems
(ex. what if IV prepared and no vein access
show & explain rectocaps®)
- *Do not overestimate re-training need...*
- *Need supervision*

Profile 505 patients (< april 2012)

Niger- Guinea C- Somalia – S Sudan

GENDER

FEMALE	50.7%
MALE	49.3%

AGE DISTRIBUTION

0-11MONTHS	13.7%
12-59 MONTHS	70.1%
>5 YEARS	16.2%

PREGNANCY	2.8%
S MALNOUR.	5.9%

CLINICAL SIGNS

- VOMITING 46.3%
- COMA AT ADM. 3.6%
- SHOCK 11.1%
- SEV. ANEMIA 24.1%
- RESP. DISTR. 14.2%
- OtHER 41,0 %

28% of all patients had vomiting as the only symptom.

route & number doses/pt

Route:

- **IV 79%**
- **IM 21%**

NUMBER OF DOSES

1	5.1%
2	11.1%
3	69.5%
4	6.3%
5	5.3%
6	1%
7	1.4%
8	0.2%

Problems reported (open question)

DURING PREPARATION

- *No problems reported during preparation.*

DURING ADMINISTRATION

- *Wrong dose prescribed* 2,5%
- *Wrong dose given* 0,2%
- *Wrong dose prescribed & given* 0,6%
- *Dose prescribed, not given* 1%
- *Incorrect timing* 0,8%

ROLL-OUT ARTESUNATE INJECTIONS MSF PROJECTS

IN USE

Burkina F		negotiation		Madagascar		negotiations
CAR		greenlighted		Mali		no greenlight
Chad				Niger		
Congo B				Nigeria		
DRC		Implementation depends on province		Sierra Leone		
Ethiopia		no greenlight		Somalia		
Guinea C				S Sudan		
Ivory Coast				Uganda		
Kenya				Zimbabwe		

Lessons learnt - conclusions

- Interest and willingness to implement in most countries
- Need for concerted in-country support
- NGO can play a role in piloting
- Quick training feasible
- Need to share experiences, tools
- Need for regularly updated Q & A
- Need supervision
- Correct use (nr doses, indications +- respected,..)
- Two-steps preparation: no problems reported



Thank you !

Dr Martin De Smet

martin.de.smet@brussels.msf.org