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Diabetic foot infections: a multi - disciplinary management

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Working in a team intra-muros and extra-muros

- GP's, home nurses, podiatrists,...
- Individual specialists
- Multidisciplinary teams
- GP's , home nurses, podiatrists,...

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diabetic patient

- Casus S.A.
 - 03-07-1940
- Diabetes and Foot ulcer

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Diabetic patient

- DM type 2 since 10 years
diamicron 3 x1

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diabetic patient

Since 2 months a foot ulcer

- Started with a blister and getted infected
- No pain
- Dermatologist: IBD- gel en tulle, afterwards aquacel
- Ciproxine 2 x 500 mg since 1 month
- NO amelioration

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A diabetic patient

Clinical examination:



diabetic foot?



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diabetic foot ?



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diabetic foot ?



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frequency

- 25 % of diabetic patients will develop a foot ulcer
- 45 - 65 y : 15 x more amputations diabetes
- > 65 y : 25 x more

Neuropathy:



Neuropathy:



Charcot foot:



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Limited joint mobility



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Micro-angiopathy:



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Combined-angiopathy:



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Macro-angiopathy:



Amputation:



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Other factors:



Co-morbidity



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Infection:



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Infection:





Infection

In diabetes, there is a spectacular and fast evolution of the infection!!

« contamination – colonisation – infection – sepsis »

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Recognize infections

« Classical » signs:

Redness

Warmth

Edema

Pain (= absent!)

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Infection?

« classical » signs:



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Infection?

« Classical » signs:



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Infection?

« Classical » signs:



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Infection?

« Classical » signs:



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Infection?

NO PAIN



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Infection?



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Infection?



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Infection?



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How to react?

«Fast reaction » for GP's!!!!

+/- 90% diabetic patients = type 2

Type 2 is a disease treated
by the GP's.



Wagner classification for GP's

Wagner Classificatie



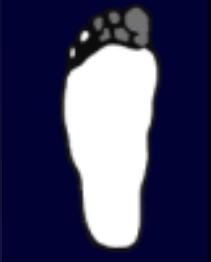
Graad I



Graad II



Graad III



Graad IV



Graad V

Oppervlakkige
wonde

Diepe
wonde

Wonde met abces
of osteomyelitis
(botontsteking)

Locaal
gangreen

Gangreen
van de hele voet

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Probe to bone



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If “probe to bone” is positive = 85% chance for osteomyelitis



Multidisciplinary teams- diabetic foot clinics

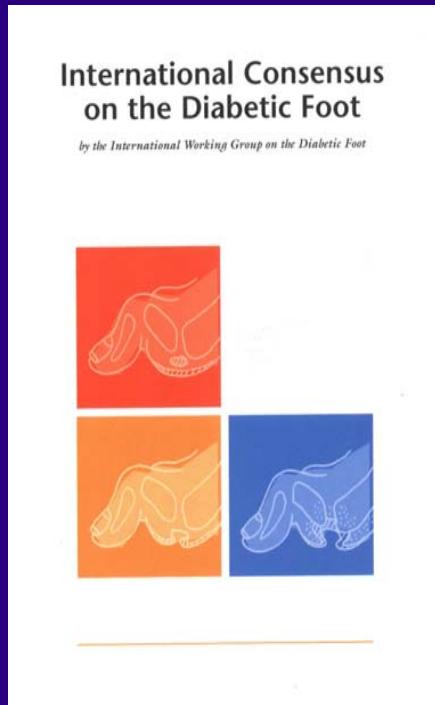
22 recognized centres in Belgium



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International consensus



Classifications,....

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Classifications

- Wagner
- Texas
- ... or VAP-Classification
- PEDIS

Workshop: Pedis-classification



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Examples...



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examples...



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Examples...

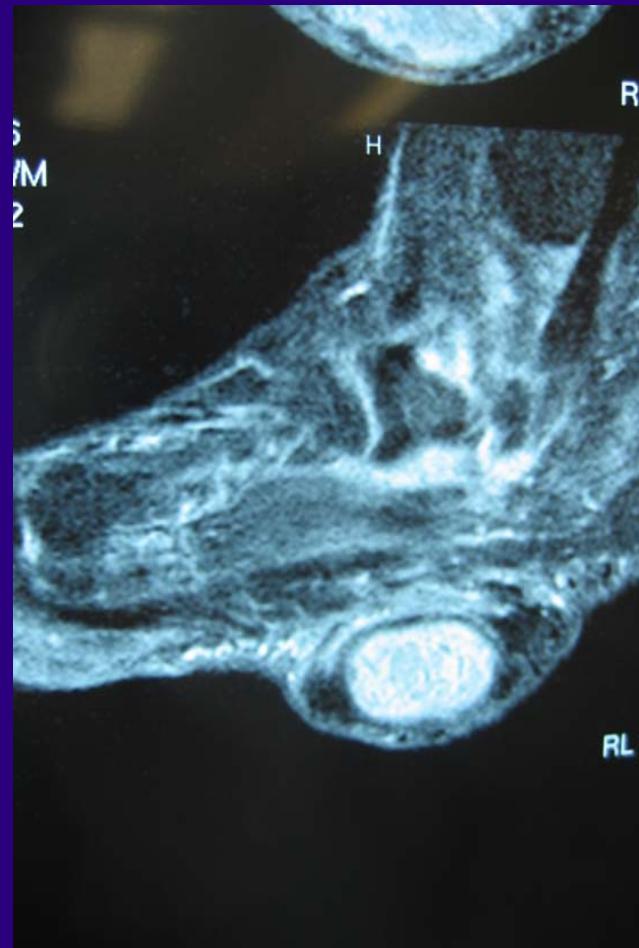


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examples...



examples...



PEDIS classification

P perfusion	E exte- nt	D depth	I infection	S sensation
1 no PAD - palpable pulses - ABI 0.9-1.1 - tcpO ₂ > 60	cm ²	1 superficial	1 no infection	1 normal
2 subcritical ischemia - no palpable pulses - ABI < 0.9 - tcpO ₂ 30-60		2 deep muscle, tendon, fascia	2 superficial erythema < 2 cm	2 loss of protective sensation - MF 2/3 neg. - VT < 25 V
3 critical ischemia - no palpable pulses - ankle pressure < 50 - tcpO ₂ < 30		3 bone	3 deep erythema > 2 cm, abscess, osteomyelitis, arthritis, fasciitis	4 systemic toxic, t°, leucocytosis (>12000 or <4000 or 10% band forms)

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examples...



P2-D2-I3-S2

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A multidisciplinary approach for diabetic foot infections



- Correct clinical diagnosis
- Good procedures for optimal microbiological diagnosis
- Optimal imaging of osteo-articular infections
- Therapeutic options
 - Antibiotics
 - Revascularization
 - Orthopaedic surgery
 - Off-loading
 - Reconstructive surgery
 - ...

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A diabetic patient

Clinical examination:



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Off loading



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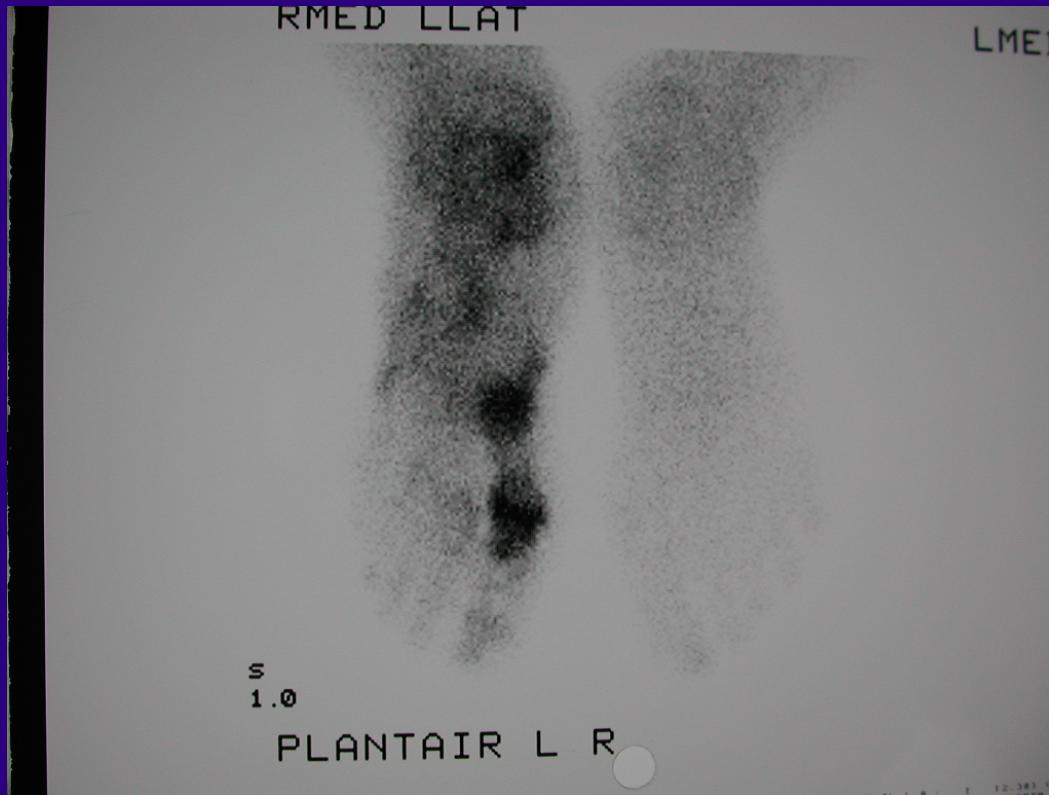
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Microbiological samples

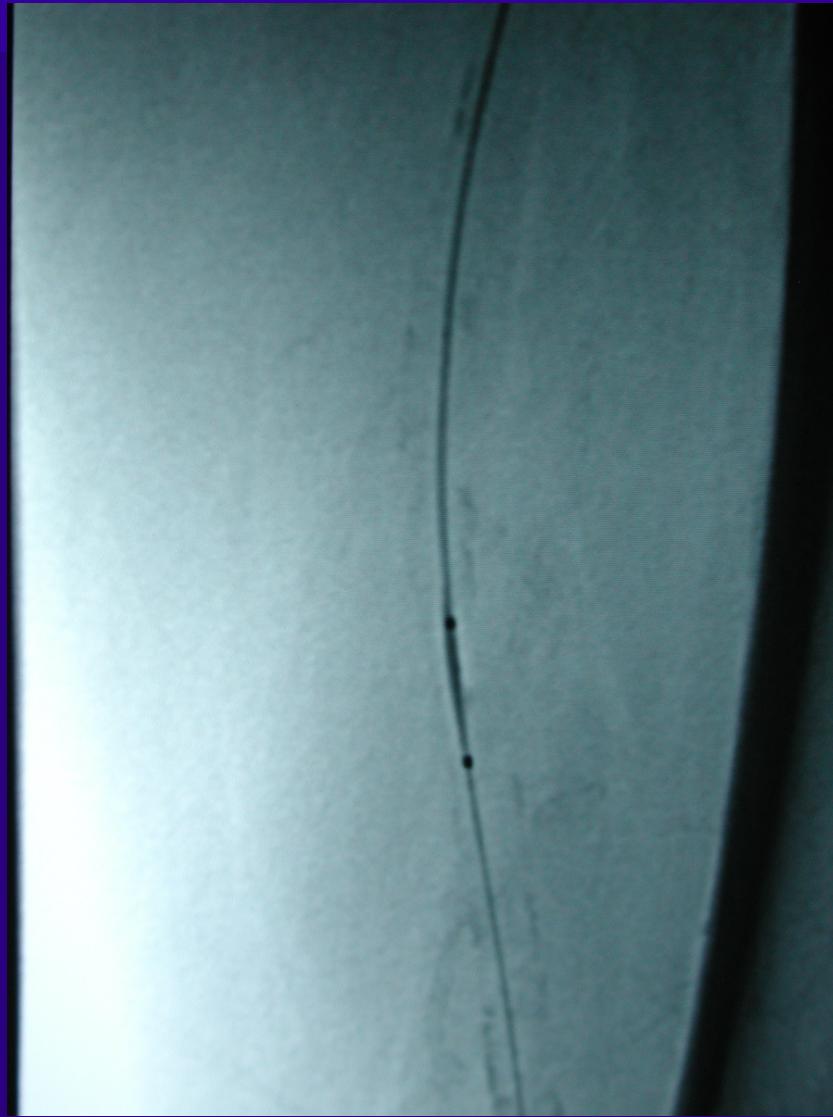


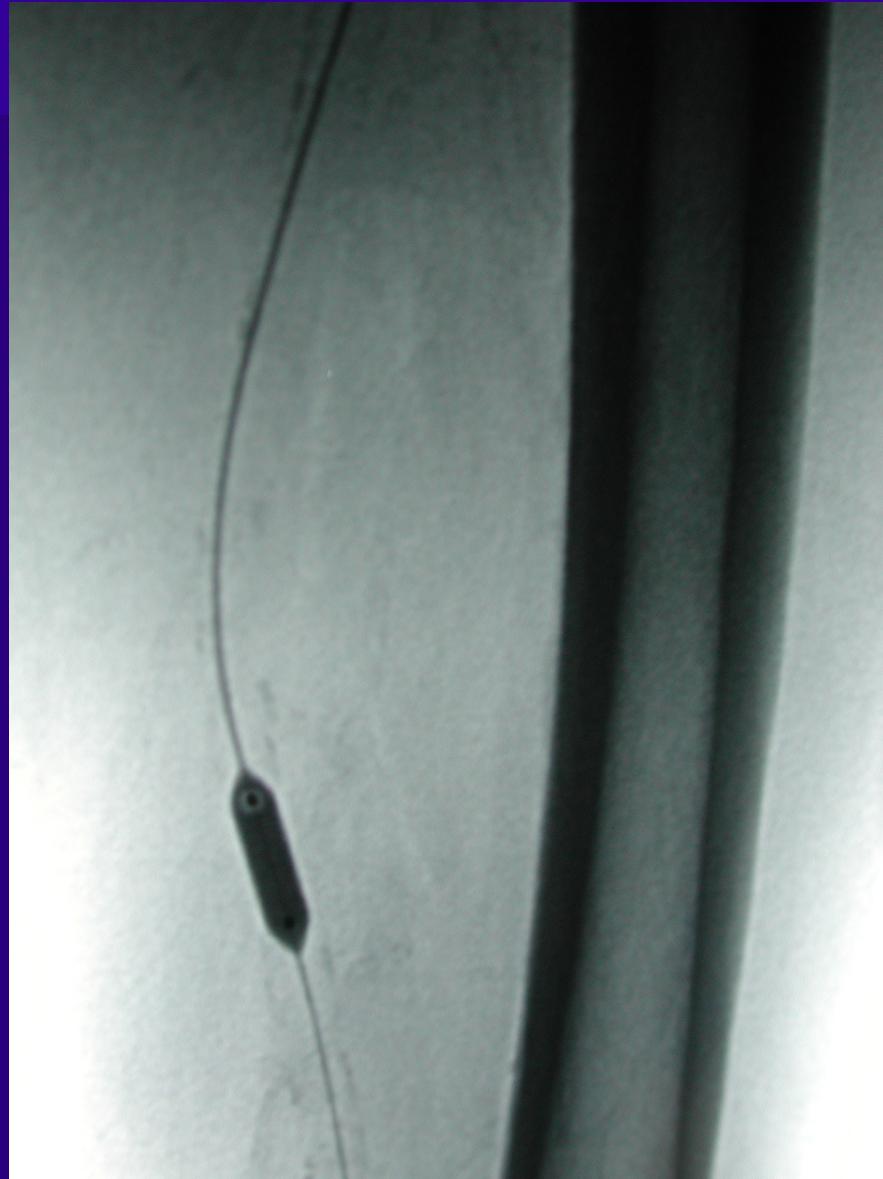
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Imaging,...











A Friday afternoon case

















Hyperbaric therapy



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Maggot therapy



Group spirit /team



ARE WE COMPLETE???



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ARE WE COMPLETE ???



Hospital hygienist

• Recommendations for health care
• providers

riskprofile

0

1

2
a

2b

3

GP's

• Recommendations for health care
• providers

riskprofile

0 1 2
 a 2b 3

Wagner classification

I II III IV V

Diabetic foot clinic

GP's

• Recommendations for health care
• providers

riskprofile

0 1 2
a 2b 3

Wagner Classification

I II III IV V

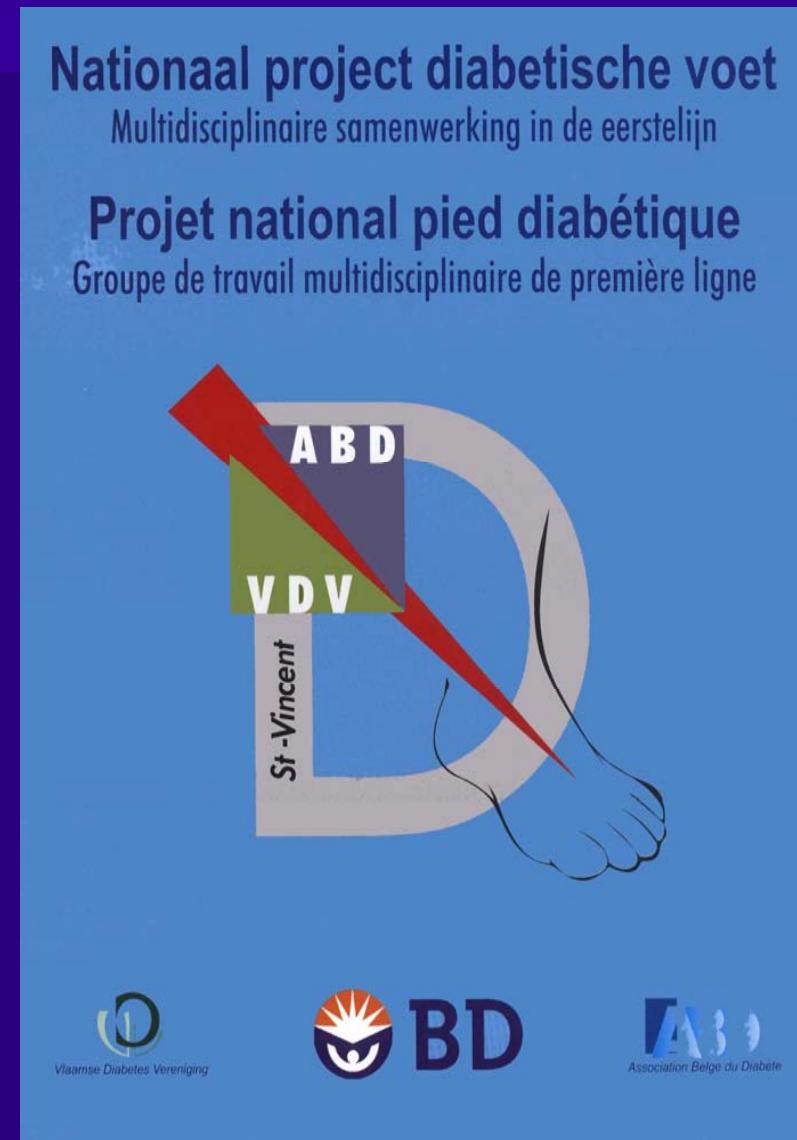
Diabetic foot clinic

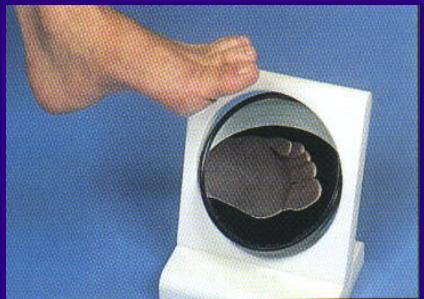
GP's

« shared care »

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National project diabetic foot

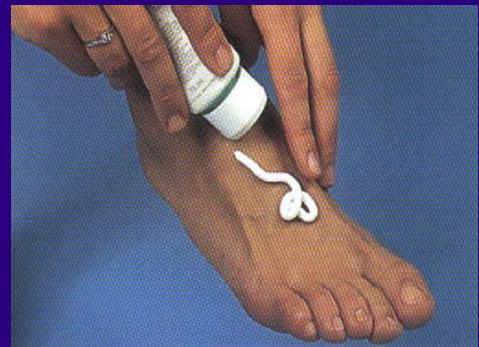


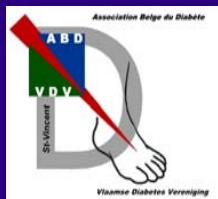


BESCHERM "JE" VOETEN

Actieplan voor mensen met diabetes

The poster features a central graphic of two yellow footprints on a dark blue, textured, torn-paper-style background. Below the graphic, there are logos for Eli Lilly Nederland (a green square with a stylized 'L') and the Nederlandse Diabetes Vereniging (a red 'D' with a foot icon). The word 'Lilly' is written in red script. The right edge of the poster has a decorative torn-paper border with several yellow footprints visible along the edge.





- A believer or a Djembé - player ?



