



World Scleroderma Foundation Digital Ulcer Working Group

Progress report: 15th June 2021

Lead investigator: Dr Michael Hughes

Working Group approved – January 2021

Background

Digital ulcers (DUs) are a major cause of pain and disability in patients with SSc. Despite a range of available treatments, around one-third of patients have ulcer refractory disease. Ulcers impact on all aspects of patients' personal, social, and family life including occupation. There is significant variation in clinician's management of DUs internationally including wound bed management (e.g., debridement). Assessment of DU burden including clinical practice and trials has been challenging; however, promising advancements have been made including ulcer ultrasound, composite (e.g., DUCAS) and patient reported (e.g., SSiDU) outcome measures.

Hypothesis:

Optimised treatment strategies: wound bed management and systemic therapies will improve DU management and outcomes for SSc-DUs.

Aims:

1. To understand differences and opinion in clinicians' practice about DU management.
2. To develop WSF-supported guidelines relating to the local wound management of SSc-DUs.
3. To develop WSF-supported guidelines relating to the systemic treatment of SSc-DUs.

Progress to date:

We have made significant advancements to date and are on track with our proposed timeline and deliverables for the WSF-endorsed treatment guidelines, despite the impact of the Covid-19 pandemic. We have a committed team of senior and junior investigators dedicated to the program of work.

WSF DU Steering Board

The Steering Board was assembled early 2021 and we held our first meeting (February/March 2021). The roles and responsibilities of the Steering Board and Working Groups were defined.

Steering board:

Hughes, Allanore, Denton, Distler, Frech, Furst, Khanna, Krieg, Kuwana, Matucci-Cerinic, Pope

Roles of the board:

1. Set the structure and global objectives of the working groups.
2. Verify the methodology.
3. Use information/recommendations from SLRs to design online voting rounds.
4. Choice of questions and Key words for the search.

Recruitment of methodologist and SLR search strategies

We successfully recruited an expert EULAR-endorsed methodologist - Dr Alessia Alunno and librarian (Mr Jan Schoones, Leiden) to develop the SLR search strategies (see attachment entitled 'SLR methodology'). This has yielded a very manageable number of articles for the local (n=480) and systemic (n=790) treatment SLRs.

Working Group Leaders and instruction to recruit the Co-Workers/Junior Colleagues

We instructed the Working Group Leaders to recruit the Co-workers late-April 2021 and all four have now be assembled and integrated into the project.

Local wound treatment Working Group

Leaders

- Dilia Giuggioli
- Pia Moinzadeh

1. Corrado Campochiaro
2. Yossra Suliman

Systemic treatment Working Group

Leaders

- Murray Baron
- Lorinda Chung

1. Nancy Maltez
2. Laura Ross

Roles of working groups:

1. Leaders to help co-workers implantation and analysis/summary of dedicated SLRs.
2. Present results of SLRs to the *overarching board* with recommendations for guideline items.
3. Participate in international voting exercises/Delphi.

Approved authorship for SLRs/treatment recommendations by the Steering Board

If **SLRs/editorials** are published separately to support the recommendations:

- **First authors:** who took initiative and wrote the paper, Hughes, Co-workers (alphabetical),
- **Last names:** steering board (alphabetical), Working Group leaders, Alessia

Treatment recommendations manuscripts

First names:

Young investigator with Working Group leader (joint first), Alessia

Last names:

Other Young investigators (alphabetical), Steering board members (alphabetical), Second Working Group leader, Hughes

Key teleconferences/meetings to date:

- First Steering Board meeting: 11th March 2021.
- Second Steering Board meeting: 23rd April 2021.
- Meeting with Local and Systemic treatment SLR Working Groups including three of the Co-Workers/Junior investigators: 10th June 2021.

Proposed timelines and deliverables of SLRs and Treatment Recommendations

Proposed timelines and deliverables

- Feb-March 2021: Assemble steering board and 1st TC
- **March-mid April 2021: Complete SLR search strategies with librarian**
- Late-April 2021: Instruct Working Group leaders to recruit co-workers for SLRs
- ➔ • May-September 2021: SLRs to be undertaken
- October 2021: Working groups to present results of SLRs to the steering board including recommendations for guideline items
- **November 2021: Develop Delphi exercise**
- **December 2021-January 2022: Conduct Delphi rounds**
- **February 2022: Analysis of Delphi exercise**
- **2nd quarter 2022: Preparation and submission of recommendation manuscripts**

DU FLARE

As another key output from the WSF DU Working Group we are developing the concept/practical definition of the a 'DU Flare'. All the members of the Steering Board and Dr Alunno have agreed to participate to this important initiative.

Invitation email to the WSF Steering Board to participate in the 'DU Flare' project.

Although DUs are frequently infected, we also observe significant perilesional erythema and oedema with associated pain. Therefore, there are likely other factors, including mechanical, which are driving this local inflammatory response, for example, increased skin tension related to extensor DUs overlying small joints, and underlying calcinosis. The role of possible reperfusion injury from such increased perfusion, including to the perilesional skin, is also unclear. We would like to propose that the Steering Board develop a consensus definition of the DU Flare which can then be used in future ulcer studies.

DU Flare proposed methodology

Step 1: Initial Steering Board meeting to discuss the scope of the problem and brainstorm important points and possible components of DU Flare definition

Step 2: Survey/poll of Steering Board members of proposed items/components to be included in the definition (agreement)

Option to propose additional new items

Step 3: MH to develop draft DU flare definition

Step 4: Steering Board members to suggest any final recommendations then approve final DU flare definition

DU Flare next steps:

Steering Board teleconferenced arranged for 24th June 2021 ('Step 1' above).

Current proposed WSF DU Working Group budget:

- Online survey manager (Aims 1 and 5): €1700
- Open access peer-reviewed publications to facilitate dissemination of knowledge (X2): €3000 (€1500 X2)
- Administrative support: €300

Enclosed attachments:

1. SLR methodology
2. Teleconference minutes 11th March 2021
3. Teleconference minutes 23rd April 2021
4. Teleconference minutes 10th June 2021