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COMMENTARY

Podcast on the IWGDF 2023 Guidelines on the Prevention of Foot Ulcers in Persons with Diabetes

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ABSTRACT

In this podcast, we discuss the 2023 update of the International Working Group on the Diabetic Foot (IWGDF) Guidelines on the prevention of foot ulcers in people with diabetes. Prevention of foot ulcers is paramount, to reduce their large burden on patients and society. Nevertheless, many clinical guidelines do not cover prevention as a topic. The IWGDF Guidelines ensure that a full chapter is dedicated to ulcer prevention. In that chapter, the key cornerstones of prevention are outlined, as well as the importance of integrated preventative foot care. With this podcast, we aim to highlight the importance of ulcer prevention and the opportunities to incorporate recommendations into clinical practice. This hopefully stimulates clinicians and researchers to increase focus on ulcer prevention in diabetic foot disease.

A podcast audio is available with this article.

Keywords: Diabetic foot; Foot ulcer; Prevention; Risk factors; Shoes; Integrated care

Key Summary Points

Preventing foot ulcers in people with diabetes is paramount to reduce their large burden on patients and society.
Ulcer prevention is underrepresented in research and clinical care.
Prevention requires integrated foot care, combining appropriate footwear, treatment of pre-ulcers, education, and self-management and -care.
Preventative foot surgery, especially flexor tenotomy, is a promising intervention for ulcer prevention, in particular when delivered integrated with other cornerstones of treatment.
Read the IWGDF Guidelines on Ulcer Prevention.

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PODCAST TRANSCRIPT

SB: Sicco Bus, Amsterdam UMC, University of Amsterdam, Amsterdam, the Netherlands.

JvN: Jaap van Netten, Amsterdam UMC, University of Amsterdam, Amsterdam, the Netherlands.

SB: Hello, my name is Sicco Bus. I am a professor of clinical biomechanics working at Amsterdam UMC in Amsterdam, the Netherlands, and I'm the Chair of the International Working Group on the Diabetic Foot (IWGDF), Working Group on Ulcer Prevention.

JvN: Hello, my name is Jaap van Netten. I'm a senior researcher at Amsterdam UMC, and I'm the Secretary of the Prevention Working Group. In this podcast, we'd like to discuss the new IWGDF 2023 update on the prevention of foot ulcers, and before we do that, Sicco, can I ask you why do we need to prevent foot ulcers?

SB: We need to prevent foot ulcers because the lifetime incidence of foot ulcers is between about 20% and 35% [1], and yearly incidence rates are about 2% in the entire population of people with diabetes [2, 3]. So this means that globally around 18 million foot ulcers occur every year, and what is especially worrying are the recurrence rates, that are around 40% within the first year of healing [1, 2]. Since each ulcer increases the risk of infection, amputation and hospitalization, and treating an ulcer costs around €10,000, we need to prevent them [1–5].

JvN: But do we have enough focus on ulcer prevention? If I look at the literature, there's a huge disparity between a focus on ulcer healing, for which numerous randomized clinical trials (RCTs) are published each year, maybe even each month, and multidisciplinary clinics focusing on ulcer healing can be found everywhere [6]. But if I look at ulcer prevention, there are hardly any new RCTs [6]. If I look at the updated guidelines, we almost included no new RCTs to base our recommendations on, and multidisciplinary treatment offering integrated preventative care is rare [7]. How do we close this gap between focus on ulcer treatment and the focus and ulcer prevention [6]?

SB: Well, this is quite hard. Prevention always involves what we call the prevention paradox: people having to do something in order to not achieve a particular outcome. We don't have the definitive answer to solve this paradox or to close this gap, but with the IWGDF Guidelines we at least try to make sure prevention is adequately covered in guidelines [7]. This is not the case in every guideline development institute [8]. So how can we ever close the gap between healing and prevention when clinicians don't get guidelines with recommendations [7, 8]? The first step in closing this gap is reading the IWGDF Guidelines [7].

JvN: I fully agree. If there's anything that listeners to this podcast will take home is to go out there and read the prevention guidelines.

SB: So when a listener does so, read the guidelines, what will they encounter?

JvN: The first cornerstone that you read in the ulcer prevention guidelines is that you need to determine the risk for ulceration [7]. For that, you need to screen for the presence of risk factors. On the one hand, this is the part where we actually have quite an extensive evidence base in the field of ulcer prevention. There are multiple large observational studies investigating various risk factors, and from these studies, we know loss of protective sensation, peripheral artery disease, and previous foot ulcers are all key risk factors [9, 10]. But on the other hand, the reason that we probably have so many studies on this is that it's relatively easy to do an observational

study, much easier than an intervention study. And yes, we know that these are risk factors, but we don't have any evidence that screening for these risk factors is an effective intervention [11, 12]. And this, again, underlines the key point in ulcer prevention—almost no one is investigating any of the interventions—and as a result, we have limited knowledge to tell us if what we're doing is actually really effective.

SB: Well despite the unknowns, the guidelines clearly recommend annual screening [7]. Foot screening should be as standard as eye screening. While this has been advocated for at least a decade, it still is an area where improvements can be made [12]. The biggest debate here lies in the screening of those at risk, so those with loss of protective sensation. Current recommendations are rather general, such as recommending screening every 1–3 months for anyone who has ever had a foot ulcer. However, a person with a recently healed ulcer should probably be seen more frequently, while someone who has been ulcer-free for a decade could likely do with annual screening. To have this debate, we need more data and more studies.

JvN: Yes and, again, I completely agree because there's so much we don't know in ulcer prevention, and at the same time, there's quite a lot that we can already recommend. So for that, let's focus on this last group, these people at high risk that you were saying: those with loss of protective sensation and a foot ulcer in their history. What do we need to do, and what do we describe in the guideline that's needed for this group of people to prevent new foot ulcers?

SB: The key here lies in the integrated care, where appropriate footwear, treatment of pre-ulcers, and education are provided in an integrated manner [7, 13]. Patient's behavior plays a central role here, in wearing the appropriate footwear and in self-checking for pre-signs of ulceration. Therefore, education to coach people to perform this behavior is very critical. And while we cannot do without education, there is also no evidence yet that tells us how to do this exactly [14].

JvN: And education focuses on behavior, but there is actually also an intervention that takes much of the behavior out of the equation, which is surgery. If you operate on a foot, it doesn't matter what the person is doing. We do make recommendations on foot surgery, but then again, operating on an intact but fragile foot requires caution and careful consideration. What we have now in the new guidelines is a clear recommendation on flexor tenotomy where we have a new RCT, but for any other surgical intervention in the intact foot, we need much better studies and data before we can truly recommend that as a part of integrated foot care [7, 14].

SB: That's definitely true, but flexor tenotomy is a very promising intervention that we do list in the guidelines. So let's end where we started this podcast. Multidisciplinary treatment for ulcer healing is now usual care, but integrated care where footwear, pre-ulcerative treatment, including surgery, and education is offered by one team, is exceptionally rare. Let's hope that listeners to this podcast will feel empowered to take on that challenge and start setting up integrated-care ulcer-remission clinics.

JvN: I fully agree with that and I would be very happy if that would be the result of the podcast, and it was very great to discuss this all with you today.

SB: Yes, I fully agree. Thank you, Jaap.

JvN: And thank you, Sicco, and thank you, listeners.

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Declarations

Conflict of Interest. A full conflict of interest statement of both authors in relation to the IWGDF Guidelines can be found at https://iwgdfguidelines.org/prof-sicco-a-bus/ and at https://iwgdfguidelines.org/dr-jaap-van-netten/.

Ethical Approval. This podcast is based on previously conducted studies and does not contain any new studies with human participants or animals performed by any of the authors.

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