

Short Article

## Proposal of a Scoring System to Amit Jain's Screening Tool for Foot In Diabetes

Amit Kumar C Jain<sup>1, 2</sup>

<sup>1</sup>Consultant and head, Amit Jain's Institute of Diabetic Foot & Wound Care, Brindhavvan Areion Hospital, Bengaluru, India

<sup>2</sup>Professor, Department of Surgery, Raja Rajeswari medical college, Bengaluru, India

\*Corresponding Author  
Amit Kumar C Jain

Article History: | Received: 01.04.2020 | Revision: 19.04.2020 | Accepted: 29.04.2020 | Published: 30.04.2020 |

**Abstract:** Screening of the foot is a well-known preventive strategy which is often neglected by many health care professionals. Various screening tool exist for foot with each having their own merits and demerits and their respective followers. One screening tool proposed by author, the Amit Jain's triple assessment, is a new screening tool for diabetic foot that addresses the triopathy efficiently with minimum most parameters that should be assessed thereby rendering it an extremely easy to use and remember screening tool for every healthcare professional dealing with diabetes and diabetic foot. In this article, the author proposes a score to the LFT screening tool so that it leads to new prospects for research on this tool.

**Keywords:** Diabetes, Foot, Amit Jain, Screening, Triple assessment, Scoring.

**Copyright © 2020:** This is an open-access article distributed under the terms of the Creative Commons Attribution license which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use (Noncommercial, or CC-BY-NC) provided the original author and source are credited.

## INTRODUCTION

With increasing prevalence of diabetes worldwide, its complication, the diabetic foot is also increasing and it subjects a diabetic patient to a 10 to 30 times higher risk of extremity amputation (Jain, A. K. C., & Gopal, S. 2020; Kurup, R. *et al.*, 2019). To prevent complications and amputations, screening serves to be an important strategy. However, it is well known in literature that it is not practiced efficiently in most parts of the world (Jain, A. K. C., & Gopal, S. 2020). Various experts have proposed different screening tools for diabetic foot from different parts of the world. Some of the screening tool are Inlow's 60 second screening tool, simplified 60 second screening tool, Amit Jain's 10 to 20 second screening tool/triple assessment, etc. All of them have their own benefits and demerits but they aimed to provide a method of screening (Jain, A. K. C. 2017; Jain, A. K. C. *et al.*, 2019).

The Inlow's screening tool has a score ranging from 0 to 25 and patients have risk classification and

recommendation of frequency of screening (Al- Lenjawi, B. *et al.*, 2017).

The Amit Jain's triple assessment, also known as Amit Jain's 10 to 20 second screening tool, Amit Jain's Linear foot test, Amit Jain's screening tool, etc, was proposed in 2017 wherein minimum most parameters were suggested that were extremely essential in screening (Jain, A. K. C., & Gopal, S. 2020; Jain, A. K. C. 2017).

Different expert considers different parameters like rubor, erythema, fissures, blisters, etc to be essential in screening tool (Al-Lenjawi, B. *et al.*, 2017; Woodbury, M. G., *et al.*, 2015). Further, there are few who believe and suggest maceration, dermatitis, etc to be important and needs to be incorporated in screening tool (Al-Lenjawi, B. *et al.*, 2017). If one considers all of them, then one can imagine the burden a screening tool can face and they further can create literature confusions (Jain, A. K. C. 2014). In reality, many of the parameters are not essential when on consider screening tool protocols. Those parameters should consider in detail examination and not in screening.

The triple assessment for foot in diabetes has 3 simple parameters, the Look, the Feel and the Test component (LFT) that addresses the triopathy (Jain, A. K. C., & Gopal, S. 2020; Jain, A. K. C. *et al.*, 2019). Studies done on this screening tool showed that even if parameters were downsized to just 3, only 6.7% to 7.7% of feet were evaluated in different studies done on this screening tool.

The author proposes a new score for this screening tool which shall open new prospects for research on this scoring system for screening.

Figure 1 shows the new Amit Jain’s scoring for the LFT screening tool. The minimum score here is 0 and maximum score is 3 rendering it extremely simple to remember.

**AMIT JAIN’S SCORING SYSTEM FOR THE LFT SCREENING TOOL**

| PARAMETERS | DESCRIPTION  |     | SCORE |
|------------|--|-----|-------|
| LOOK       | Any infection/ulcer or pre-ulcer causing pathology like callus | No  | 0     |
|            |  | Yes | 1     |
| FEEL       | Pulses of foot – Palpable or not                               | Yes | 0     |
|            |  | No  | 1     |
| TEST       | Sensation of the foot- Present or not                          | Yes | 0     |
|            |  | No  | 1     |

Figure 1 showing the new simple scoring for the Amit Jain’s triple assessment for foot in diabetes

A quarterly, semi-annually and annual follow up can be done by respective health care professional based on risk group and the single assessment and double assessment should be considered during follow- up. Just the way the author had given a coding system for diabetic foot ulcer similar to TNM staging concept

(Jain, A, K, C. 2020), one can consider a coding system for this LFT screening tool (Figure 2). One can easily use the coding in their practice as there are just 3 parameters rendering it efficient in remembering and documenting this screening tool.



**Figure 2:** showing the plantar view of left foot (Look Component). Left great toe has callus, there is severe underlying neuropathy and pulses are palpable. As per Amit Jain’s coding it is L1F0T1 (or L<sub>1</sub>F<sub>0</sub>T<sub>1</sub>). The Amit Jain’s score is 2.

## CONCLUSION

Amit Jain's triple assessment is one of the simplest screening tools that addresses the triopathy in diabetic foot and it has minimum parameters that are essential. Adding a score to the LFT screening is done to open further prospects for research on this screening tool.

## REFERENCES

1. Jain, A. K. C., & Gopal, S. (2020). Comparing foot evaluation in hospitalized diabetic patients between surgeons, orthopedicians and physicians through Amit Jain's triple assessment. *East African Scholars J Med Sci*, 3(5), 169-178.
2. Kurup, R., Ansari, A. A., Singh, J., & Raja, A. V. (2019). Wound care knowledge, attitudes and practice among people with and without diabetes presenting with foot ulcers in Guyana. *The Diabetic Foot Journal*, 22(3), 24-31.
3. Jain, A. K. C. (2017). Amit Jain's triple assessment for foot in Diabetes – the simplest and the fastest new screening tool in the world. *IJMSCI*, 4(6), 3015-19.
4. Jain, A. K. C., Apoorva, H. C., & Kumar, K. (2019). Screening of diabetic foot through Amit Jain's triple assessment: A 10 to 20 second screening method. *Int J Orthod Sci*, 5(2), 227-229.
5. Al-Lenjawi, B., Mohamed, H., & Azmy, A. (2017). Is it time to reconsider the 60 seconds diabetic foot screen reorganizing the 60 second foot exam for people with diabetes? *Dermatol Open J*, 2(1), 10-15.
6. Woodbury, M. G., Sibbald, R. G., & Ostrow, B. (2015). Tool for rapid easy identification of high-risk diabetic foot: Validation and clinical pilot of the simplified 60 second diabetic foot screening tool. *Plos One*, 10(6), e0125578.
7. Jain, A. K. C. (2014). A new staging system for cellulitis in diabetic lower limbs – improving diabetic foot practice around the world. *J Diab Foot Comp*, 6(2), 48-53.
8. Jain, A. K. C. (2020). Development of a new Amit Jain's scoring system for diabetic foot ulcer. *IAR J Med Sci*, 1(1), 31-34.