

Short Communication

Amit Jain's Laws, Statement, Quotes and Rules in Diabetic Foot and Surgery

Amit Kumar C Jain

Consultant and Head, Amit Jain's Institute of Diabetic Foot and Wound Care, Brindhavvan Areion Hospital, Bengaluru, India

Article History

Received: 04.01.2020

Accepted: 18.01.2020

Published: 27.01.2020

Journal homepage:

<https://www.easpublisher.com/easjms>

Quick Response Code



Abstract: Diabetic foot is one of the most common complication that occurs in patients with diabetes and various new concepts on this disease have been developed in past few years. Amit Jain's system of practice is one such new modern diabetic foot surgery system that was developed by the author from India. This article highlights few contributions done by the author in diabetic foot field and also in surgery.

Keywords: Diabetic Foot, Law's, Rule's, Amit Jain, Quotes, Surgery, India.

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

Surgery is a rapidly growing field with various new concepts being developed in different segments. There are various rules, quotes, laws etc. Each of them has different application for the entity that is stated (Srivastava, A. et al., 2009). Amit Jain's laws, quotes, rules, statement are well known in the field of diabetic foot and surgery and this article aims to discuss some of the common laws and rules in medicine and surgery and also the one laid down under Amit Jain's principle and practice of diabetic foot (Jain, A.K.C. 2018; Gopal, S., et al., 2019).

RULES AND LAWS IN SURGERY

There are different laws in surgical field. The author divides surgical laws into 2 groups (Figure 1).

First group are laws which are directly applicable to surgery and second groups are those laws which are indirectly applied to surgery like those from law of physics. Courvoisier's law is one such direct law applicable to gall bladder disease and is quite popular in surgical field (Shenoy, K.R. 2020). Amit Jain's law's in diabetic foot are also direct laws (Jain, A.K.C. 2018; Gopal, S., et al., 2019; Haridarshan, S.J. 2018). The other indirect laws derived from physics and applied to surgery are Laplace's law applied to colonic perforation, Pascal's law applied for Hernia repair, etc (Srivastava, A. et al., 2009; Srivastava, A. et al., 2010).

Some of the well-known rules also which are used in surgery are Goodsall's rule for fistula, Wallace rule of nine for burn's, Rule of 2 for Meckel's diverticulum, etc (Shenoy, K.R. 2020).

AMIT JAINS CLASSIFICATION FOR SURGICAL LAWS

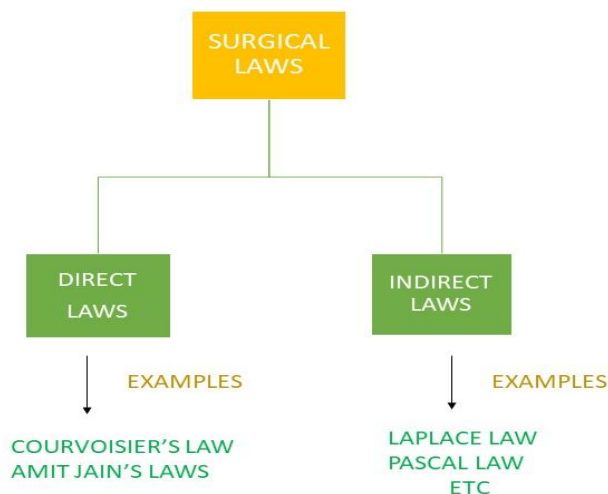


Figure 1. Showing Amit Jain’s classification for surgical laws

Amit Jain, the author who pioneered and design Amit Jain’s system of practice, the modern diabetic foot surgery from India for first time also had laid down various quotes, rules, laws and statements (Jain, A.K.C. 2018; Gopal, S., et al., 2019; Haridarshan, S.J. 2018; Jain, A.K.C. 2019).

AMIT JAIN’S LAWS IN DIABETIC FOOT

3 laws have been laid down till date in diabetic foot by Amit Jain (Jain, A.K.C. 2018; Haridarshan, S.J. 2018). 2 laws were laid down to avoid plagiarism. The following are Amit Jains laws.

AMIT JAIN’S LAW OF CLASSIFICATION

This law states that “Diabetic foot, a complex disease, is multi-factorial, multi-pathological, multi-anatomical with multi-level involvement and multi-systemic complications requiring multi-disciplinary involvement. Hence, it is impossible for a single classification for diabetic foot to predict the outcome in each and every patient and to guide specific treatment for each patient using a single classification that encompasses many lesions in diabetic foot” (Jain, A.K.C. 2018). This law encourages the usage of combination of classification like Amit Jain’s universal classification and Amit Jain’s scoring system (Jain, A.K.C. 2018; Gopal, S., et al., 2019; Gopal, S. 2018).

AMIT JAIN’S LAW OF OFFLOADING

This law states that “Any viscoelastic/elastic materials used in isolation or in combination in thickness of acceptable range like felted foam should be considered to be a variation of Amit Jain’s offloading system (Jain, A.K.C. 2018).

AMIT JAIN’S LAW OF CODING

This law states that “Irrespective of whichever diabetic foot ulcer classification is used and its concurrent coding like SAC coding, SAS coding, etc or any subsequent modification made on this coding system, all of them shall remain Amit Jain’s Coding system for diabetic foot ulcer” (Jain, A.K.C. 2018; Jain, A.K.C. 2017).

AMIT JAIN’S RULE OF ‘3’ IN DIABETIC FOOT

This rule involves assimilation all the common 3’s seen in diabetic foot (Haridarshan, S.J. 2018; Jain, A.K.C. 2018a). This is an open rule which means one can add new 3’s as and when they encounter in literature on diabetic foot without creating any new named modification or extended version. The author identified recently few more such 3’s like the 3-minute examination (Miller, J.D. et al., 2014), Triple arthrodesis in Charcot foot in diabetes (Pakarinen, T.K. et al., 2002), 3 types of diabetic footwear (Jain, A.K.C. 2019), 3 types of foot amputations (Jain, A.K.C., & Tejasvitaa, R.S. 2019), etc that can be seen in table 1.

Table 1: Showing the Amit Jain's rule of 3 in diabetic foot

This is one of the largest rules in surgical field (Haridarshan, S.J. 2018; Jain A.K.C. 2018a).

- “3” cuneiform bones
- “3” phalanx in lesser toes
- “3” arches in the foot
- “3” parts of foot
- “3” plantar interossei
- “3” muscles in 3rd layer of foot
- “3” major form of foot
- “3” main leg arteries supply foot
- “3” main causes (Triad)
- “3” neuropathy (Sensory, Motor, Autonomic)
- “3” components in Amit Jain's screening (Triple assessment)
- “3” main types of diabetic foot complications (Amit Jain's Type 1, Type 2, Type 3 complications)
- “3” sites for abscess (Dorsum, Plantar, Interdigital)
- “3” types of gangrene (Wet gangrene, Dry gangrene, Gas gangrene)
- “3” common bone problems (Osteomyelitis, Toe deformities, Charcot foot)
- “3” common sagittal plane lesser toe deformities (Hammer toe, Claw toe, Mallet toe)
- “3” new classes of ulcers (Amit Jain's Class 1, Class 2, Class 3 diabetic foot ulcers)
- “3” components in Amit Jain's ulcer coding (Size, Anatomical area, Class)
- “3” components in Amit Jain's debridement classification (Grading, Extent, Repetition)
- “3” commonest amputation done (Toe amputation, Transmetatarsal, Below knee amputation)
- “3” types of offloading (Amit Jain's Type 1, Type 2, Type 3)
- “3” monthly follow up (At risk foot)
- “3” laws in diabetic foot (Amit Jain's law's)

New “3” s

- “3” minute examination
- “3” types of diabetic foot Classifications
- “3” arthrodesis in diabetic Charcot foot (Triple arthrodesis)
- “3” types of callus (Amit Jain's Type 1, Type 2, Type 3)
- “3” types of Charcot foot (Amit Jain's Type 1, Type 2, Type 3)
- “3” classes of toe deformities (Amit Jain's Type 1, Type 2, Type 3)
- “3” types of foot amputations (Amit Jain's Type 1, Type 2, Type 3)
- “3” types of Diabetic footwear (Amit Jain's Type 1, Type 2, Type 3)

AMIT JAIN'S STATEMENT FOR DIABETIC FOOT

“Diabetic foot is caused by a triad consisting of neuropathy, ischemia and infection with neuropathy being of 3 types. The triple assessment for foot should be the minimum evaluation tool for diabetic foot. The diabetic foot complications can be categorized into any of the 3 types. Diabetic foot can be affected by many pathological lesions ranging from abscess that can occur at any of the 3 sites, any of the 3 gangrenes, any 3 bony problems with the lesser toes being affected with any 3 deformities or by ulcers that can be placed into any one of the 3 classes which can be coded with 3 components. One of the commonest surgical procedures on diabetic foot is debridement that can be classified in 3 components. Patients may end up in one of the 3 common amputations. Diabetic foot wounds can be

offloaded with any one of the 3 types. The diabetic foot at risk should be followed at least once in 3 months. Diabetic foot is governed by 3 laws” (Jain, A.K.C. 2018).

AMIT JAIN'S QUOTES

The following are some of the quotes (Jain, A.K.C. 2019; Jain, A.K.C. 2019a) used by the author in his teaching with few being in rhythm. The Amit Jain's “SCC” concept quote of diabetic foot can also be extended to hernia.

“Diabetic foot is a complex disease with many complications and every effort should be made to understand and treat it in as simple way as possible – Dr Amit Jain”

“Hernia is a complex disease with many complications and surgeries and every effort should be made to understand and treat it in as simple effective way as possible – Dr Amit Jain”

“When in Doubt, Bring the Bowel Out – Dr Amit Jain”

“Carbuncle is an Uncle of Furuncle- Dr Amit Jain”

CONCLUSION

Diabetic foot has been an enigma for decades and various new developments have taken in past few years. The Contribution of author, who has pioneered the concept of modern diabetic foot surgery, has been immense and has impacted the practice of diabetic foot worldwide.

REFERENCES

1. Srivastava, A., Sood, A., Joy, S. P., & Woodcock, J. (2009). Principles of physics in surgery: the laws of flow dynamics physics for surgeons—part 1. *Indian Journal of Surgery*, 71(4), 182-187.
2. Jain, A. K. C. (2018). Amit Jain’s system of practice for diabetic foot: the new religion in diabetic foot field. *International Surgery Journal*, 5(2), 368-372.
3. Gopal, S., & Haridarshan, S. J. (2019). Amit Jain’s system of practice for diabetic foot: the modern diabetic foot surgery. *International Journal of Research in Orthopaedics*, 5(3), 532-539.
4. Shenoy, K. R., Shenoy, A. (2020). *Manipal manual of surgery*. 5th ed, CBS publishers, India.
5. Haridarshan, S. J. (2018). Amit Jain’s new ‘rule of 3’ for diabetic foot: an excellent compilation. *International Surgery Journal*, 5(11), 3795-3798.
6. Srivastava, A., Sood, A., Joy, P. S., Mandal, S., Panwar, R., Ravichandran, S., ... & Woodcock, J. (2010). Principles of physics in surgery: the laws of mechanics and vectors physics for surgeons—part 2. *Indian Journal of Surgery*, 72(5), 355-361.
7. Jain, A. K. C. (2019). Extended application of Amit Jain’s ‘SCC’ classification concept for diabetic foot. *Int J Surg Sci*, 3(1), 188-191.
8. Jain, A. K. C. (2019). Extended application of Amit Jain’s ‘SCC’ classification concept for diabetic foot. *Int J Surg Sci*, 3(1), 188-191.
9. Gopal, S. (2018). Amit Jain’s classification for Diabetic foot complications: The Universal classification supreme. *Int J Surg Sci*, 2(2), 8-10.
10. Jain, A. K. C. (2017). Amit Jain’s coding system for diabetic foot ulcer. *IJMSCI*, 4(7), 3126-8.
11. Jain, A. K. C. (2018a). Amit Jain’s rule of ‘3’ for diabetic foot. *IJMSCI*, 5(5), 3774-6.
12. Miller, J. D., Carter, E., Shih, J., et al. (2014). How to do a 3-minute diabetic foot exam. *J Fam Pract*, 63(11), 646-656.
13. Pakarinen, T. K., Laine, H. J., Honkonene, S. E., et al. (2002). Charcot arthropathy of the diabetic foot. Current Concepts and review of 36 cases. *Scand J Surg*, 91, 195-201.
14. Jain, A. K. C., Tejasvitaa, R. S. (2019). Jain, A. K. C., & Tejasvitaa, R. S. (2019). To Determine the Pattern and Type of Amputation Done In Diabetic Foot Patients in a Teaching Hospital. *EAS J Med Surg*, 1(3), 94-99.
15. Jain, A. K. C. (2019a). “Carbuncle is an Uncle of Furuncle” – A case report. *EAS J Med Surg*, 1(6), 175-176.