

Necrotizing Soft Tissue Infections, Review on some Important Clinical Points

Behzad Saberi

Medical Researcher, Esfahan, Iran.

*Corresponding Author: Behzad Saberi, Medical Researcher, Esfahan, Iran.

Received Date: February 18, 2023; Accepted Date: March 06, 2023; Published Date: March 15, 2023

Citation: Behzad Saberi, (2023), Necrotizing Soft Tissue Infections, Review on some Important Clinical Points, *J. Clinical Orthopedics and Trauma Care*, 5(2); DOI:10.31579/2694-0248/041

Copyright: © 2023, Behzad Saberi. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract

Necrotizing soft tissue infections are among the medical emergencies which treating them requires prompt decision making and clinical interventions including surgery and antibiotic therapy. This is a brief review on some important clinical points about such infections.

Keywords: necrotizing soft tissue infections; important clinical points; body; orthopedic clinicians

Summary

Body

Necrotizing soft tissue infections show themselves with cellulitis, bullous lesions, leucocytosis in the CBC, inflammation edema, Fever, pain and local anesthesia. Most of these finding are out of proportion. Perifacial air, vessel thrombosis, fat stranding, lymphadenopathy, fluid tracking and muscle edema can be seen in the CT scanning.

Multiple and aggressive surgical debridement and also antibiotic therapy with broad spectrum antibiotics, are two important pillars to treat the necrotizing soft tissue infections. Any delay in the treatment can result in catastrophic events resulting in expiring the patient. Surgery should be done in an aggressive manner and should be done without any delay after diagnosis and empiric antibiotic therapy with clindamycin and any antipseudomonal carbapenem or piperacillin-tazobactam and also in case of the presence of the clinical suspicion for Methicillin-resistant *Staphylococcus aureus*, an anti-Methicillin-resistant *Staphylococcus aureus* antibiotic like vancomycin or the others should be initiated without delay.

Necrotizing soft tissue infections are mainly seen in the patients with diabetes specifically ones affected with poly-microbial type. Considering this, the physician should be aware to keep this diagnosis in mind in the diabetic patients who will be presented with infections of the skin without giving acceptable response to antibiotic therapies or showing signs of systemic pathologies. Usually, surgery can make distinction between necrotizing cellulitis and fasciitis and it should be done aggressively and without delay since time is important to rescue the patient.

During surgery, obtaining the tissue gram stain and cultures is important for going further in the treatment process. Fournier's gangrene which can be seen in the necrotizing soft tissue infections should make antibiotic therapy to be done in a way that covers the *Pseudomonas*.

Although there is a score named "laboratory Risk Indicator for Necrotizing Fasciitis" or "LRINEC" score which based on that the patients with necrotizing soft tissue infections can be categorized as High, Intermediate and Low risk, but further studies should be done to completely determine its role and efficacy in clinical settings.

Conclusion

Necrotizing soft tissue infections are among the medical emergencies. Having enough knowledge about such infections and treatment strategies for them are of great importance in the medical and surgical emergency settings.

References

1. Anaya DA, Dellinger EP. Necrotizing soft-tissue infection: diagnosis and management. *Clin Infect Dis*. 2007; 44:705–710.
2. Yilmazlar T, Ozturk E, Alsoy A, et al. Necrotizing soft tissue infections: APACHE II score, dissemination, and survival. *World J Surg*. 2007; 31:1858–1862.
3. Elliott DC, Kufera JA, Myers RA. Necrotizing soft tissue infections: Risk factors for mortality and strategies for management. *Ann Surg*. 1996; 224:672–683.
4. Wong CH1, Khin LW, Heng KS, Tan KC, Low CO. (2004), The LRINEC (Laboratory Risk Indicator for Necrotizing Fasciitis) score: a tool for distinguishing necrotizing fasciitis from other soft tissue infections. *Crit Care Med*. 2004 Jul; 32(7):1535–1541.
5. Anaya DA, McMahon K, Nathens AB, Sullivan SR, Foy H, Bulger E. (2005), Predictors of mortality and limb loss in

- necrotizing soft tissue infections. Arch Surg. 2005; 140(2):151–157.
6. Carbonetti F, Cremona A, Carusi V, et al. (2016), The role of contrast enhanced computed tomography in the diagnosis of necrotizing fasciitis and comparison with the laboratory risk indicator for necrotizing fasciitis (LRINEC) Radiol Med.2016 Feb;121(2):106–121
 7. Hefny AF, Eid HO, Al Hussona M, et al. (2007), Necrotizing fasciitis: A challenging diagnosis. Eur J Emerg Med. 2007; 14:50–52.



This work is licensed under Creative Commons Attribution 4.0 License

To Submit Your Article Click Here:

Submit Manuscript

DOI:[10.31579/2694-0248/041](https://doi.org/10.31579/2694-0248/041)

Ready to submit your research? Choose Auctores and benefit from:

- fast, convenient online submission
- rigorous peer review by experienced research in your field
- rapid publication on acceptance
- authors retain copyrights
- unique DOI for all articles
- immediate, unrestricted online access

At Auctores, research is always in progress.

Learn more <https://auctoresonline.org/journals/clinical-orthopaedics-and-trauma-care>