22nd Global Conference on
Diabetes, Endocrinology and Primary Healthcare
May 30-31, 2024 | Amsterdam, Netherlands
Volume : 09

Efficacy of Adjunctive Granulocyte Colony Stimulating factor in the management of Diabetic foot infection: a Meta-analysis

Samantha Katrina S. Reyes, MD, Bulacan, Philippines
Ynna Margarita S. Vergara, MD, Bulacan, Philippines

Statement of the Problem: Diabetic foot infection (DFI) is one of the macrovascular complications affecting patients with diabetes. In the Philippines, diabetic foot ulcers are very common, accounting to 16- 20% of the yearly emergency room admissions.

The optimal management based on IDSA guidelines are focused on antibiotic therapy, wound care, debridement of necrotic tissue and callus and amputation of non-salvageable limb. The purpose of this study is to evaluate the efficacy of Granulocye-Colony Stimulating Factor (G-CSF) as an adjunct, in the management of Diabetic foot infection.

Methodology & Theoretical Orientation: This study focused on prospective randomized studies with the main purpose is to investigate the effectiveness of G-CSF in managing diabetic foot infection. Studies included efficacy in the management of DFI comparing standard treatment versus standard treatment with adjunctive G-CSF therapy.

Findings: G-CSF injections in addition to standard treatment did not significantly affect the clinical resolution of infection or the likelihood or rate of healing of wounds. The meta-analysis revealed that adding G-CSF was associated with a significantly reduced likelihood of lower extremity surgical interventions. Adjunctive G-CSF treatment does not appear to hasten the clinical resolution of diabetic foot infection or ulceration but is associated with a reduced rate of amputation and other surgical procedures.

Conclusion & Significance: Administering G-CSF may be associated with shorter recovery time, rapid tissue regeneration, and lower limb amputation. G-CSF therapy was associated with a statistically significant reduced risk of requiring lower-extremity amputation as well as other foot infection–related invasive interventions. Because amputations are among the most feared and expensive consequences of diabetic foot infections, reducing their incidence would be a major benefit to diabetic patients and to their health care systems.

Biography

Samantha Katrina Reyes is a current fellow in training in Adult Cardiology. She is an advocate of prevention and treatment of Peripheral vascular complications of Diabetes in limited resource settings. She has the vision in improving the healthcare system in 3rd world countries, particularly in the Philippines.

sksreyes0917@gmail.com

Abstract received : March 22, 2024 | Abstract accepted : March 23, 2024 | Abstract published : 10-06-2024