

GCSF Use In Diabetic Foot Infections

Background:

- Foot infection is common in patients with Diabetes accounting for about 20% of Diabetes related hospital admissions in UK and cause substantial morbidity and mortality.
- Treatment of serious foot infection remains difficult ,often requiring long hospital stays.
- 50% of non-trauma related lower limb amputation occur in patients with Diabetes .

Methods:

Study included patients with Type 1 and Type 2 DM admitted to hospital with severely infected (invasive cellulities >2 cm +/- osteomyelitis) neuropathic/neuroischemic ulceration.Data collected retrospectively using proforma from 2002 to 2006.All patients were given 7 day course of GCSF subcutaneously (5 mcg/kg,reduced according to neutrophil count)along with intensive antibiotic therapy guided by wound swab culture results (if available).All patients were given oral Aspirin (300 mg/od) and dipyridamole (200 mg/ bd) to reduce the risk of small vessel occlusion.Glycemia was optimised by appropriate insulin therapy and wound debrided as necessary.

Results:

Total number of patients were 25 (68% male and 32% female).Mean age was 63 years (range 44-89 years).72% patients had Type 2 DM and 28% had Type 1 DM.Mean duration of DM was 24 years (range 2-56 years).72% patients were on insulin,24% were on OHA and 4% on diet.Mean HbA1c was 8.0 (range 5.5 – 12.0) .72% of patients had previous foot ulcers ,32% had previous osteomyelitis,44% had previous amputation.56% of patients had neuropathic ulcers,40% had neuroischemic ulcers and 4%had ischemic ulcers.60% of patients had proven osteomyelitis on admission .Mean duration of stay in the hospital was 12.4 days .None of these patients had complications of GCSF.

Conclusions:

Ulcers healed in 76% of patients (19/25) .6 patients underwent amputation [major (1) and minor (2)].Ulceration persisted in 6 patients ,one patient underwent major amputation and 2 patients continued to attend clinic.No significant complications.Median length of hospital stay was 9 days.

Clinicians involved are impressed by the tissue quality after GCSF use,but we have no accurate data on recurrence rates or time to complete healing.