

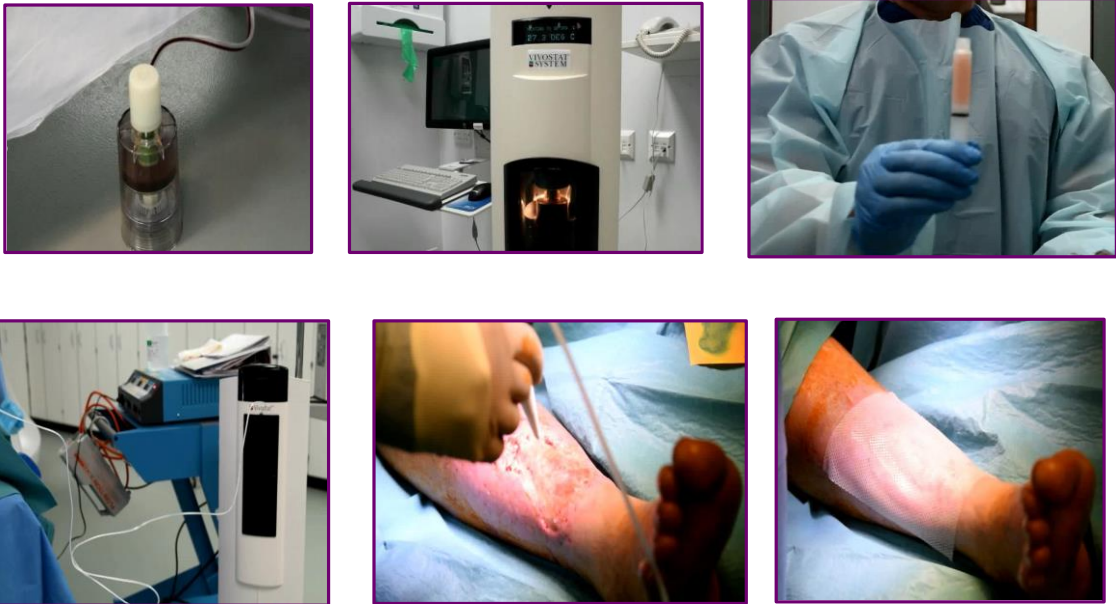
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### Objective

Patient with Critical Limb ischaemia (CLI) often presents with large ulcers in the lower limbs and require revascularization. Even after a successful complex revascularization, getting those large ulcers healed remains a big challenge for a Vascular Surgeon. Some of diabetic foot ulcer, wound following various types of foot/toe amputation, some venous ulcers also display a persistent challenge of healing. Local treatment with autologous platelet rich plasma gel have been shown to promote ulcer healing by releasing Platelet Derived Growth Factor (PDGF), Transformin Growth factor-β3 (TGF- β3), Vascular Endothelial Growth Factor (VEGF). The Vivostat®- PRF (Platelet Rich Fibrin) treatment thus promotes wound healing in these chronic and complex wounds. This study was designed to see if Vivostat®- PRF treatment promotes healing of chronic ulcers and improve symptoms.

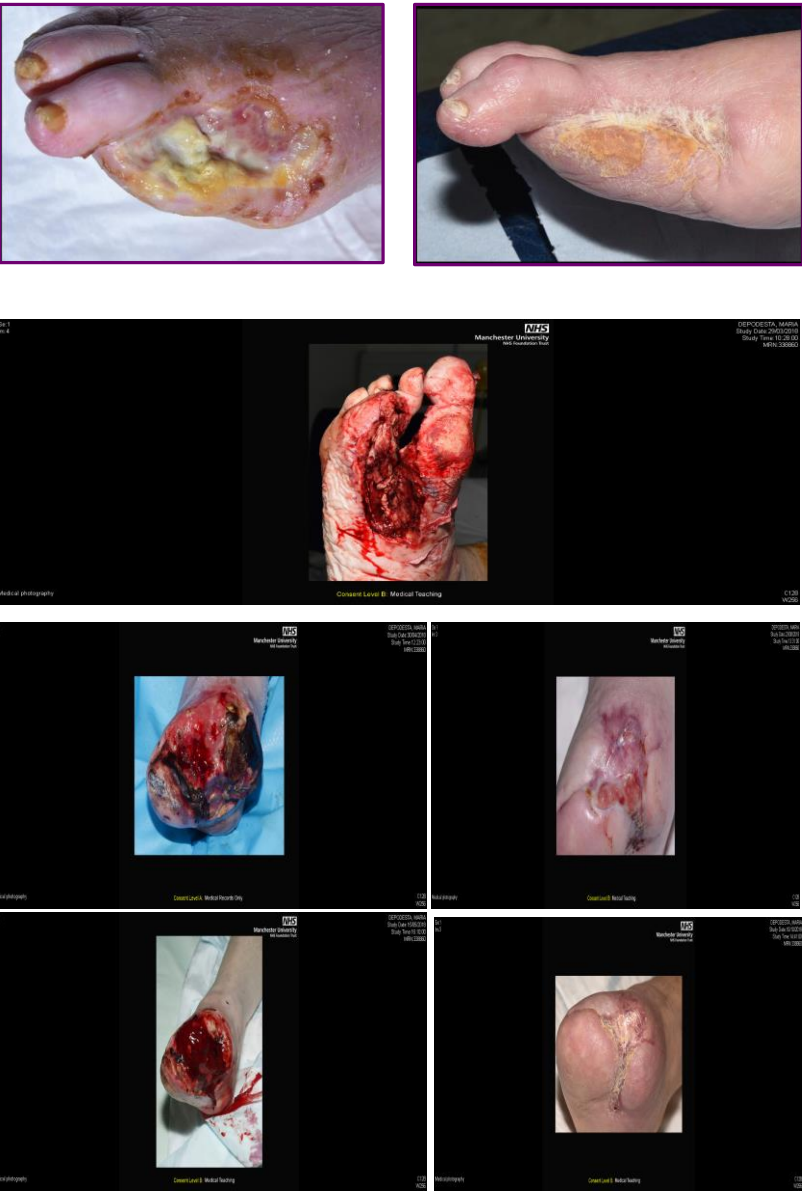
### Methods

Patients received Vivostat\* treatment to treat chronic or non-healing vascular, diabetic, and other ulcers. 120 mls of blood was taken from the patient, processed in Vivostat\* Machine, produces 6 mls of concentrate rich in platelet and fibrin. Wound were prepared surgically; concentrate gel was applied on the ulcer using a separate Vivostat\* applicator machine. Wound healing was monitored clinically and with medical illustrations. Patient characteristics, details of vascular status and intervention, details of Vivostat\* treatment and post treatment outcomes, were collected and analyzed.



### Result

Total of 71 patients were treated with Vivostat\*. Wound healing achieved in 64.7% patients (n=46). Of those, 46.4% (n=33) healed fully, 18.3% (n=13) wounds were nearly healed in a given period of time. Wounds in 18 patients (25.3%) failed to heal, 7 patients lost follow-up. Healing time ranges from 2 weeks to 5 months. All Patients experienced relief of pain and discomfort soon after the treatment.



### Before & After PRF treatment



### Conclusion

Vivostat\*-PRF treatment promotes ulcer healing and is an effective way to treat ulcers. It provides significant patient comfort, promotes early hospital discharge. This also reduces mortality and morbidity associated with CLI, reduces hospital stay; decreases burden on health care system. Vivostat\*-PRF treatment may combat the problem of persistent challenge of vascular ulcer and other wound healing.

### References

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