Case Report: Use of Autologous Platelet Grafting in the Treatment of a Chronic Surgical Wound Dehiscence

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History of Present Illness: R.F. is a 64 year old male in good health, who developed a wound



dehiscence after tarsal tunnel decompression surgery on the left ankle. The patient is not diabetic, nor immunocompromised. He was referred to a hospital based wound care center, and had 54 hyperbaric treatments in addition to standard wound care protocols and treatment. The wound had failed to heal with that treatment, and he presented to our clinic for evaluation and treatment with autologous platelet grafting with platelet rich plasma(PRP) using the Harvest Technologies SmartPReP® system.

<u>Physical Examination</u>: Initial evaluation revealed the presence of a wound 35mm x 14mm x 3mm, with surrounding redness, and pain with palpation. A deep tissue culture was taken, and Klebsiella pneumoniae was grown out. Appropriate antibiosis cleared the infection in one week. The wound bed was fibrinous, and poorly granulated, which was the result of heavy colonization.

<u>Treatment</u>: Once the infection had resolved, the patient presented to the clinic for extensive wound debridement, which required local anesthetization, followed by application of an autologous platelet graft with PRP from the Harvest Technologies SmartPReP® system. 20 cc's of the patient's blood was drawn prior to debridement for processing of the graft. He was grafted 3 times as delineated in the table.

Treatment Results:

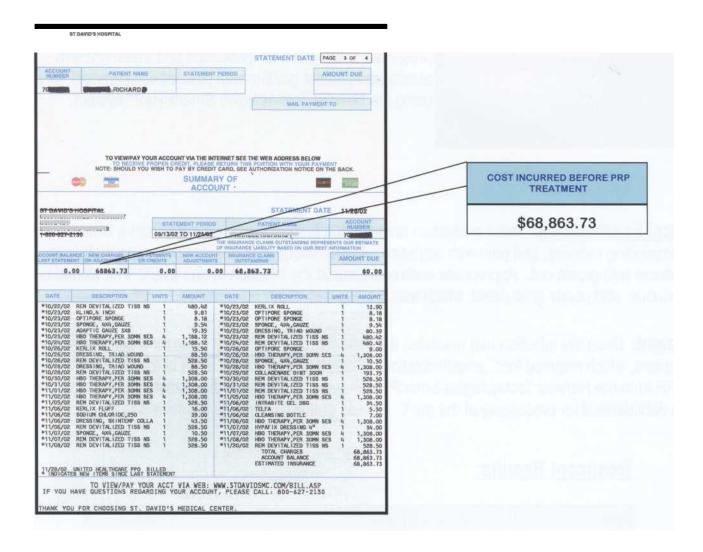
Date:	10/15/02*	10/29/02*	11/11/02*	11/20/02
Wound Size:	35mm x14mm x3mm	24mm x5mm x1.5mm	18mm x 3mm x 2mm	CLOSED

^{*} APG treatment with PRP





Summary: This patient's wound was completely closed in 35 days, with 3 autologous grafts using PRP. It is also important to note that not only was the clinical result excellent, but as can be seen from the copy of his bill from the wound care center, this treatment was also economically beneficial.



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