

# **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.



**Physical Examination:** 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 antibiotics cleared the infection in one week. The wound bed was fibrinous, and poorly granulated, which was the result of heavy colonization.

**Treatment:** 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	<b>CLOSED</b>

\* 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.

ST DAVID'S HOSPITAL

STATEMENT DATE PAGE 3 OF 4

ACCOUNT NUMBER	PATIENT NAME	STATEMENT PERIOD	AMOUNT DUE
70	RICHARD		

MAIL PAYMENT TO

TO VIEW/PAY YOUR ACCOUNT VIA THE INTERNET SEE THE WEB ADDRESS BELOW  
NOTE: SHOULD YOU WISH TO PAY BY CREDIT CARD, SEE AUTHORIZATION NOTICE ON THE BACK.

**SUMMARY OF ACCOUNT**

ST DAVID'S HOSPITAL STATEMENT DATE 11/28/02

STATEMENT PERIOD	PATIENT NAME	ACCOUNT NUMBER
09/13/02 TO 11/25/02		70

THE INSURANCE CLAIMS OUTSTANDING REPRESENTS OUR ESTIMATE OF INSURANCE LIABILITY BASED ON OUR BEST INFORMATION

ACCOUNT BALANCE LAST STATEMENT	NEW CHARGES OR ADJUSTMENTS	PATIENTS OR CREDITS	NEW ACCOUNT ADJUSTMENTS	INSURANCE CLAIMS OUTSTANDING	AMOUNT DUE
0.00	68863.73	0.00	0.00	68,863.73	00.00

DATE	DESCRIPTION	UNITS	AMOUNT	DATE	DESCRIPTION	UNITS	AMOUNT
*10/22/02	REM DEVITALIZED TISS NS	1	480.42	*10/23/02	KERLIX ROLL	1	13.90
*10/23/02	KLING, 4 INCH	1	9.81	*10/23/02	OPTIPORE SPONGE	1	8.18
*10/23/02	OPTIPORE SPONGE	1	8.18	*10/23/02	OPTIPORE SPONGE	1	8.18
*10/23/02	SPONGE, 4X4, GAUZE	1	9.54	*10/23/02	SPONGE, 4X4, GAUZE	1	9.54
*10/23/02	ADAPTIC GAUZE 3X8	1	19.35	*10/23/02	DRESSING, TRIAD WOUND	1	80.39
*10/23/02	HBO THERAPY, PER 30MN SES	4	1,188.12	*10/23/02	REM DEVITALIZED TISS NS	1	480.42
*10/24/02	HBO THERAPY, PER 30MN SES	4	1,188.12	*10/24/02	REM DEVITALIZED TISS NS	1	480.42
*10/26/02	KERLIX ROLL	1	15.90	*10/26/02	OPTIPORE SPONGE	1	9.00
*10/26/02	DRESSING, TRIAD WOUND	1	88.50	*10/26/02	HBO THERAPY, PER 30MN SES	4	1,308.00
*10/26/02	REM DEVITALIZED TISS NS	1	528.50	*10/28/02	SPONGE, 4X4, GAUZE	1	10.50
*10/28/02	DRESSING, TRIAD WOUND	1	88.50	*10/28/02	HBO THERAPY, PER 30MN SES	4	1,308.00
*10/28/02	REM DEVITALIZED TISS NS	1	528.50	*10/29/02	COLLAGENASE, OINT 30GM	1	193.75
*10/30/02	HBO THERAPY, PER 30MN SES	4	1,308.00	*10/30/02	REM DEVITALIZED TISS NS	1	528.50
*10/31/02	HBO THERAPY, PER 30MN SES	4	1,308.00	*10/31/02	REM DEVITALIZED TISS NS	1	528.50
*11/01/02	HBO THERAPY, PER 30MN SES	4	1,308.00	*11/01/02	REM DEVITALIZED TISS NS	1	528.50
*11/02/02	HBO THERAPY, PER 30MN SES	4	1,308.00	*11/05/02	HBO THERAPY, PER 30MN SES	4	1,308.00
*11/03/02	REM DEVITALIZED TISS NS	1	528.50	*11/06/02	INTRASITE GEL, D80	1	34.50
*11/06/02	KERLIX FLUFF	1	16.00	*11/06/02	TEFLA	1	5.50
*11/06/02	SODIUM CHLORIDE, 250	1	39.00	*11/06/02	CLEANSING BOTTLE	1	7.00
*11/06/02	DRESSING, SK INTERF, COLLA	1	43.50	*11/06/02	HBO THERAPY, PER 30MN SES	4	1,308.00
*11/06/02	REM DEVITALIZED TISS NS	1	528.50	*11/07/02	HYFAX DRESSING 4"	1	34.00
*11/07/02	SPONGE, 4X4, GAUZE	1	10.50	*11/07/02	HBO THERAPY, PER 30MN SES	4	1,308.00
*11/07/02	REM DEVITALIZED TISS NS	1	528.50	*11/08/02	HBO THERAPY, PER 30MN SES	4	1,308.00
*11/08/02	REM DEVITALIZED TISS NS	1	528.50	*11/20/02	REM DEVITALIZED TISS NS	1	528.50
					TOTAL CHARGES		68,863.73
					ACCOUNT BALANCE		68,863.73
					ESTIMATED INSURANCE		68,863.73

11/28/02 UNITED HEALTHCARE PPO BILLED  
INDICATES NEW ITEMS SINCE LAST STATEMENT

TO VIEW/PAY YOUR ACCT VIA WEB: WWW.STDAVIDSMC.COM/BILL.ASP  
IF YOU HAVE QUESTIONS REGARDING YOUR ACCOUNT, PLEASE CALL: 800-627-2130

THANK YOU FOR CHOOSING ST. DAVID'S MEDICAL CENTER.

**COST INCURRED BEFORE PRP TREATMENT**

**\$68,863.73**

\*Board Certified in Foot and Ankle Surgery by the American Board of Podiatric Surgery, Board Certified in Wound Care, Dir. of Surgical Training, The Institute for Peripheral Nerve Surgery, Baltimore, MD, Dir. of Research, Houston Podiatric Foundation