PREVENA™ 美國FDA唯一核准負壓裝置．有效降低切口術後感染率

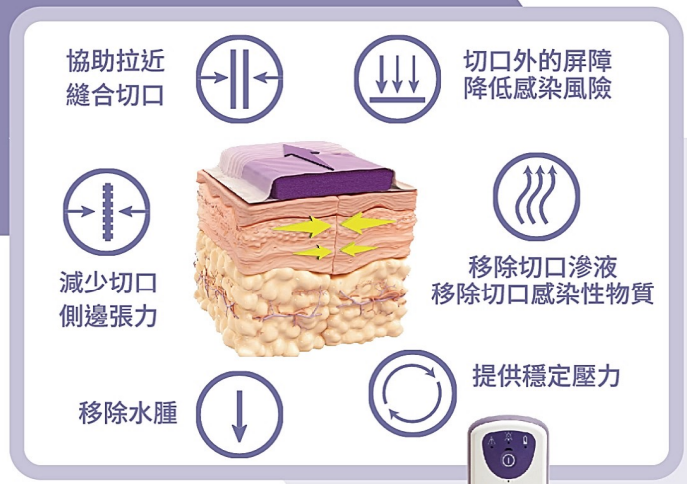
骨折後 可能面臨哪些問題？

- Q1 肢體腫脹
- Q2 患部疼痛
- Q3 產生死腔
- Q4 傷口感染
- Q5 血液循環不良
- Q6 切口延遲癒合
- Q7 軟組織損傷
- Q8 關節僵硬

皮膚壞死

腫脹、水泡、關節僵硬

預防手術切口併發症 是手術成功的重要議題



骨科手術後，使用PREVENA™ (可使用5-7天)

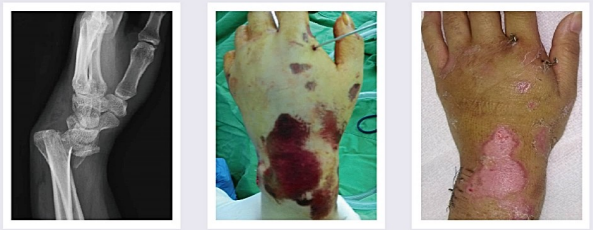
手術切口是手術過程中在皮膚及身體組織中切開的傷口，醫生會使用醫用縫合線和醫用縫合釘等產品進行縫合。

使用PREVENA™不僅可預防手術切口併發症，更能減少不適感，提昇生活品質。

骨折手術後 使用PREVENA™

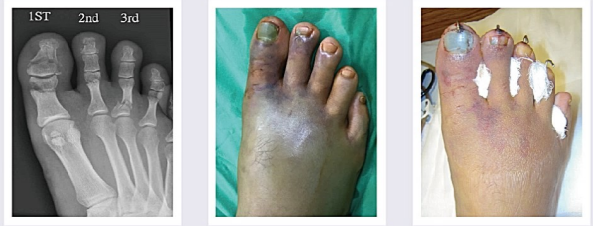
X光 » 使用前 » 使用後

手部骨折



使用PREVENA™成功地避免皮膚壞死

腳掌骨折



使用PREVENA™有效地緩解水腫及脹痛

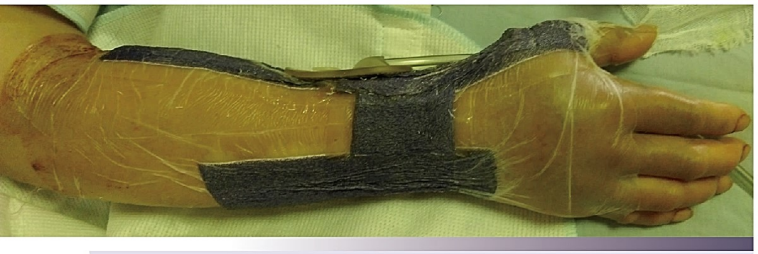
足踝骨折

使用PREVENA™可加速傷口癒合 避免傷口感染

骨折手術後使用PREVENA™可以減少骨折引起的腫脹、緩解脹痛感、促進血液循環、避免皮膚與軟組織的壞死、降低手術感染的發生率，並且加速傷口癒合。

本資料之骨科臨床圖片均由高雄榮總唐逸文醫師提供

常見骨折手術後
結合PREVENA™使用



遠端尺、橈骨同時骨折

脛骨平台高能量粉碎性骨折

脛骨遠端高能量粉碎性骨折

國際期刊研究報告

Incisional Negative Pressure Wound Therapy After High-Risk Lower Extremity Fractures

James P. Stannard, MD, David A. Volgas, MD,† Gerald McGwin III, PhD,‡ Rena L. Stewart, MD,† William Obremskey, MD,§ Thomas Moore, MD,‖ and Jeffrey O. Anglen, MD¶*

Results: Two hundred forty-nine patients with 263 fractures have enrolled in this study with 122 randomized to Group A (controls) and 141 to Group B (NPWT). There was no difference between the groups in the distribution of calcaneus (39%), pilon (17%), or tibial plateau (44%) fractures. There were a total of 23 infections in Group A and 14 in Group B, which represented a significant difference in favor of NPWT (P = 0.049). The relative risk of developing an infection was 1.9 times higher in control patients than in patients treated with NPWT (95% confidence interval, 1.03–3.55).

骨折手術後使用一般方式照顧傷口，比起術後使用PREVENA™，感染率高了1.9倍。

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Negative pressure wound therapy vs. conventional management in open tibia fractures: Systematic review and meta-analysis

Jun-Ho Kim, Dae-Hee Lee*

Table 3
Overall clinical complication in the included studies.

Study (year)	No. of tibias		Soft-tissue infection (%)		Osteomyelitis (%)		Amputation (%)		Nonunion (%)		Flap necrosis (partial or total) (%)		Flap revision (%)	
	NPWT	Control	NPWT	Control	NPWT	Control	NPWT	Control	NPWT	Control	NPWT	Control	NPWT	Control
Artiet al. (2016)	30	30	10.0	13.3	NA		NA		NA		20.0	35.6	3.3	3.3
Blum et al. (2012)	166	63	8.4	20.6	NA		NA		28.9	34.9	2.7	5.6	NA	
Costa et al. (2018)	226	234	7.1	8.1	NA		1.8	2.6	4.4	7.7	NA		NA	
Joyakumar et al. (2013)	20	20	35.0	90.0	NA		NA		NA		NA		NA	
Joethy et al. (2013)	51	18	9.8	33.3	NA		NA		NA		5.9	11.1	NA	
Lable et al. (2004)	14	12	21.4	50.0	0.0	0.0	7.1	8.3	14.3	25.0	0.0	16.7	28.6	28.6
Liu et al. (2012)	78	25	24.4	24.0	16.7	0.0	NA		NA	NA	41.0	52.0	24.4	44.0
Parrett et al. (2006)	53	35	15.1	14.3	NA		NA		NA		NA		NA	
Rezzadeh et al. (2015)	12	20	25.0	45.0	0.0	30.0	0.0	0.0	8.3	40.0	0.0	15.0	33.3	35.0
Rinker et al. (2008)	17	38	0.0	7.0	5.9	9.3	5.9	4.7	5.9	7.0	17.6	39.5	11.8	18.6
Stannard et al. (2009)	37	25	5.4	28.0	NA		5.4	0.0	NA		NA		NA	
Viranic et al. (2016)	43	50	0.0	4.0	4.7	18.0	0.0	2.0	NA		NA		NA	

NPWT, negative pressure wound therapy; NA, not applicable.

骨折手術後使用PREVENA™，比起常規照顧，可降低軟組織感染率、癒合不全率、皮瓣壞死率與皮瓣再次手術率。

※本文件為內部教育訓練使用

prevena™

骨折手術的應用

讓骨折手術後傷口恢復的過程
更快、更舒適

骨骼的損傷由醫師專業手術修復
傷口康復的過程交給

PREVENA™ 術後傷口照護系統