RENASYS◊ EDGE tNPWT clinical cases

Smith+Nephew

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RENASYS◊ EDGE tNPWT case studies

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Treatment of a cavity wound with moisture associated skin damage

Michael Douglas Galera, Director of Care, Cedarstone Enhanced Care, Nova Scotia, Canada

Key points

RENASYS® EDGE tNPWT allowed the patient to continue daily activities while managing the wound and promoting healing

The wound progressed towards healing, after initiation of RENASYS EDGE tNPWT despite compromised pressure area care

Patient

A 59-year-old male suffered a cerebrovascular accident, resulting in paraplegia and wheelchair-dependence. The patient suffered with ongoing incontinence that created severe moisture associated skin damage (MASD), eventually manifesting as a cavity wound. Treatment was delivered at the patient's place of residence, a long-term care facility.

Treatment

- Initial treatment included pressure relief, optimal skin care and nutritional protein supplement
- Wound packed with antibacterial dressing, non-sting skin prep applied to peri-wound area, covered with a foam dressing and changed 3x weekly 1 week prior to initiating treatment with RENASYS EDGE tNPWT
- Wound healing impeded due to patient non-compliance with pressure area care and repositioning regimes
- Patient spent extended periods of time in their wheelchair that did not adhere to the recommended/ optimal pressure redistribution plan
- The wound management team, including patient and family through shared decision making (SDM) wanted the resident to enjoy life while still managing the wound and promoting healing
- Decision was made to switch treatment to RENASYS EDGE tNPWT with foam filler, alongside continuation of skin care and pressure relief
- Dressing changed 3x weekly due to requirement of bowel stimulation and evacuation
- Wound present for ~23 weeks at time of initiation with RENASYS EDGE tNPWT

Conclusions

RENASYS EDGE tNPWT System utilized in the treatment of a MASD-induced cavity wound, achieving successful healing outcomes in line with pre-specified SDM treatment goals and maintenance to the patient's quality of life.

Day 7

1 week after starting treatment with RENASYS EDGE tNPWT, fast and effective results seen, treatment continued
LWD: 5.0 x 3.3 x 4.0cm

Day 21

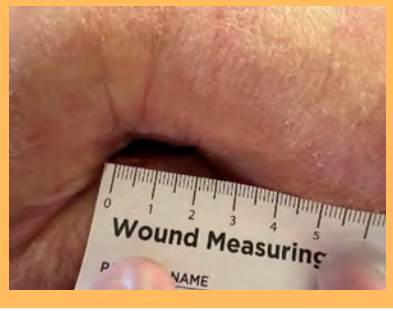
3 weeks after starting treatment with RENASYS EDGE tNPWT, tunneling resolved and exudate being managed effectively
LWD: 5.0 x 3.0 x 3.0cm

Day 84

12 weeks after starting treatment with RENASYS EDGE tNPWT, substantial contraction of wound and reduction in size
LWD: 3.0 x 1.0 x 2.0cm

Day 138

~20 weeks after starting treatment with RENASYS EDGE tNPWT, healing continued and further reduction of wound size observed
LWD: 2.0 x 0.7 x 2.0cm



Treatment of a non-healing pressure injury

Patricia L Kearney, CEO & Administrator, Tidal View Manor, Nova Scotia, Canada

Patient comfort and quality of life maintained during therapy with RENASYS◊ EDGE tNPWT

HCPs found RENASYS EDGE tNPWT user-friendly

Wound progressed towards healing, allowing step across to sNPWT when clinically appropriate

Patient

A 43-year-old male with multiple comorbidities, including limited mobility, developed an unstaged pressure injury on the right heel. Wound was non-healing with a history of infection, unsuccessful antibiotic treatment, and osteomyelitis development. Treatment was delivered at patient's place of residence, a long-term care facility.

Treatment

- Specialist wound care involvement instigated 4 weeks post-pressure injury development, wound documented as non-healing with presence of infection
- Initial treatment included regular sharp debridement, antibiotics and alternative tNPWT
- Patient developed several infections, leading to hospitalization due to osteomyelitis, and subsequent long-term antibiotic treatment
- Decision was made by HCPs to switch treatment to RENASYS EDGE tNPWT with foam filler
- Continuous tNPWT treatment, dressing changed Tuesdays and Fridays
- Following clinical improvement, including reduction in wound size and exudate levels, treatment was stepped across to PICO◊ sNPWT

Conclusions

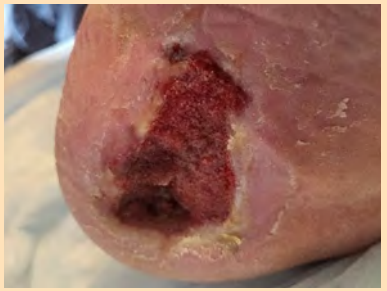
RENASYS EDGE System utilized in the treatment of a non-healing pressure injury, achieving successful healing outcomes in line with pre-specified treatment goals and maintenance to the patient's quality of life.

Day 0

Prior to initiating treatment with RENASYS EDGE tNPWT
LWD: 7.0 x 5.2 x 1.4cm

Day 21

~3 weeks after starting treatment with RENASYS EDGE tNPWT, 100% granulation tissue
LWD: 6.0 x 3.5 x 1.0cm



Day 56

~8 weeks after starting treatment with RENASYS EDGE tNPWT, healthy granulation tissue with increased epithelialization evident
LWD: 4.8 x 3.2 x0.5cm

Day 70

~10 weeks after starting treatment with RENASYS EDGE tNPWT, substantial contraction and reduction in size

Treatment of a pressure injury on the right ischium

Leticia Vallejo, President and Professor, Wound Care Plus Research and Education Center, San Juan, Puerto Rico

Wound successfully healed with use of RENASYS◊ EDGE tNPWT

Patient

A 64-year-old patient with a previous history of multiple comorbidities including diabetes mellitus type 2 and high blood pressure presented with a pressure injury to the right ischium. Treatment was delivered at the clinic.

Treatment

- Continuous mode therapy on RENASYS EDGE tNPWT was utilized for 1 week before switching to variable intermittent mode

Conclusions

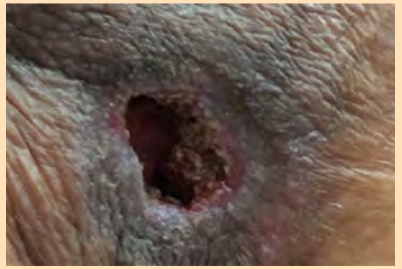
RENASYS EDGE System utilized in the treatment of dehiscence of a surgical wound, wound healed in line with pre-specified treatment goals 42 days after treatment initiation.

Day 0

Prior to initiating treatment with RENASYS EDGE tNPWT, 30% necrotic and 70% granulating tissue observed
LWD: 2.3 x 2.5 x 1.2cm

Day 17

~2.5 weeks after starting treatment with RENASYS EDGE tNPWT, 80% granulating and 20% epithelialized tissue observed
LWD: 1.2 x 1.2 x 0.8cm



Day 30

2 weeks after starting treatment with RENASYS EDGE tNPWT, 60% granulating and 40% epithelialized tissue observed
LWD: 1.0 x 1.0 x 0.5cm

Day 42

Wound achieved closure with 100% epithelial tissue observed
LWD: 0.0 x 0.0 x 0.0cm

Treatment of a chronic wound following necrotizing fasciitis

Leticia Vallejo, President and Professor, Wound Care Plus Research and Education Center, San Juan, Puerto Rico

Wound healed with use of RENASYS® EDGE tNPWT

Patient

A 65-year-old patient with a previous history of multiple comorbidities including diabetes mellitus type 2 and high blood pressure presented with a chronic wound to the right thigh for 6 months. Treatment was delivered at the clinic.

Treatment

- Continuous mode therapy on RENASYS EDGE tNPWT was utilized for 3 weeks before switching to variable intermittent mode

Conclusions

RENASYS EDGE System utilized in the treatment of dehiscence of a surgical wound, wound healed in line with pre-specified treatment goals 42 days after treatment initiation.

Day 0

Prior to initiating treatment with RENASYS EDGE tNPWT, 100% granulating tissue observed
LWD: 6.0 x 0.5 x 0.5cm

Day 21

3 weeks after starting treatment with RENASYS EDGE tNPWT, 75% granulating and 25% epithelialized tissue observed
LWD: 4.5 x 0.3 x 0.4cm

Day 30

2 weeks after starting treatment with RENASYS EDGE tNPWT, 70% granulating and 30% epithelialized tissue observed
LWD: 4.0 x 0.3 x 0.3cm

Day 42

Wound achieved closure with 100% epithelial tissue observed
LWD: 0.0 x 0.0 x 0.0cm

Treatment of an open surgical wound (dehiscence) on the wrist

Leticia Vallejo, President and Professor, Wound Care Plus Research and Education Center, San Juan, Puerto Rico

Wound successfully healed with use of RENASYS◊ EDGE tNPWT

Patient

A 61-year-old patient with multiple comorbidities including high blood pressure, osteoarthritis and peripheral vascular disease presented with dehiscence of a surgical wound to the right wrist. Treatment was delivered at the clinic.

Treatment

- Variable intermittent mode therapy on RENASYS EDGE tNPWT was utilized

Conclusions

RENASYS EDGE System utilized in the treatment of dehiscence of a surgical wound, achieving successful healing outcomes in line with pre-specified treatment goals at 5 weeks after treatment initiation.

Day 0

Prior to initiating treatment with RENASYS EDGE tNPWT, with tunneling observed (5.0cm) and exposed tendon
LWD: 1.5 x 1.0 x 0.5cm

Day 7

1 week after starting treatment with RENASYS EDGE tNPWT, 100% granulation tissue, with tunneling observed (4.5cm) and no exposed tendon
LWD: 1.0 x 0.5 x 0.5cm

Day 21

3 weeks after starting treatment with RENASYS EDGE tNPWT, 100% granulation tissue, with tunneling observed (1.0cm)
LWD: 0.7 x 0.5 x 0.4cm

Day 35

5 weeks after starting treatment with RENASYS EDGE tNPWT, 100% epithelialization, with tunneling resolved
LWD: 0.0 x 0.0 x 0.0cm

Treatment of an open surgical wound (dehiscence) on the abdomen

Leticia Vallejo, President and Professor, Wound Care Plus Research and Education Center, San Juan, Puerto Rico

Wound successfully healed with use of RENASYS◊ EDGE tNPWT

Patient

A 45-year-old patient with no comorbidities presented with dehiscence of a surgical wound to the abdomen. Treatment was delivered at the clinic.

Treatment

- Variable intermittent mode therapy on RENASYS EDGE tNPWT was utilized

Conclusions

RENASYS EDGE System utilized in the treatment of dehiscence of a surgical wound, achieving successful healing outcomes in line with pre-specified treatment goals at ~3 weeks after treatment initiation.

Day 0

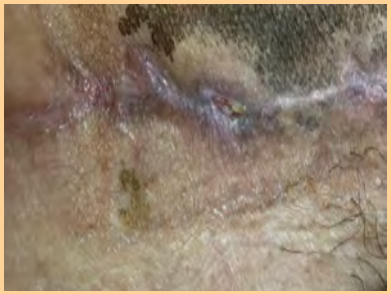
Prior to initiating treatment with RENASYS EDGE tNPWT, 60% granulation tissue observed
LWD: 2.0 x 3.0 x 1.0cm

Day 7

1 week after starting treatment with RENASYS EDGE tNPWT, 90% epithelialization tissue and 10% granulation tissue observed
LWD: 0.3 x 0.5 x 0.3cm

Day 14

2 weeks after starting treatment with RENASYS EDGE tNPWT, almost 100% epithelialization tissue observed
LWD: 0.2 x 0.2 x 0.2cm



Day 22

Wound now fully epithelialized, ~3 weeks after initiating treatment with RENASYS EDGE tNPWT
LWD: 0.0 x 0.0 x 0.0cm

Treatment of an open surgical wound (dehiscence) on the lower back

Leticia Vallejo, President and Professor, Wound Care Plus Research and Education Center, San Juan, Puerto Rico

Wound progressed towards healing with use of RENASYS® EDGE tNPWT

Patient

A 48-year-old patient with comorbidities including high blood pressure and hyperlipidemia presented with dehiscence of a surgical wound to the lower back. Treatment was delivered at the clinic.

Treatment

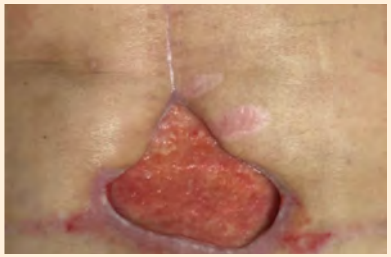
- Continuous mode therapy on RENASYS EDGE tNPWT was utilized

Conclusions

RENASYS EDGE System was utilized in the treatment of dehiscence of a surgical wound, reducing wound size in line with pre-specified treatment goals at only 7 days after treatment initiation.

Day 0

Prior to initiating treatment with RENASYS EDGE tNPWT, significant tunneling observed at 9 to 3 o'clock positions, ranging from 7.5–14cm
LWD: 6.0 x 9.0 x 1.0cm



Day 2

2 days after starting treatment with RENASYS EDGE tNPWT, tunneling reduced to 6.3–13cm. 100% granulation tissue observed
LWD: 6.0 x 7.5 x 1.0cm

Day 4

4 days after starting treatment with RENASYS EDGE tNPWT, tunneling reduced to 6.0–12cm
LWD: 5.0 x 6.5 x 1.0cm

Day 7

Wound continuing to reduce in size, tunneling reduced to 5.0–11cm
LWD: 5.0 x 6.0 x 0.8cm

Treatment of an open surgical wound (dehiscence) following cesarean section

Leticia Vallejo, President and Professor, Wound Care Plus Research and Education Center, San Juan, Puerto Rico

Wound healed with use of RENASYS® EDGE tNPWT

Patient

A 25-year-old patient with no comorbidities presented with dehiscence of a surgical wound following cesarean section. Treatment was delivered at the clinic.

Treatment

- Continuous mode therapy was used for the first 4 days before switching to variable intermittent mode therapy on RENASYS EDGE tNPWT

Conclusions

RENASYS EDGE System was utilized in the treatment of dehiscence of a surgical wound, wound healed in line with pre-specified treatment goals 18 days after treatment initiation.

Day 0

Prior to initiating treatment with RENASYS EDGE tNPWT, 20% necrotic and 80% granulating tissue observed
LWD: 1.0 x 3.0 x 0.5cm

Day 7

1 week after starting treatment with RENASYS EDGE tNPWT, 5% necrotic, 45% granulating and 50% epithelialized tissue observed
LWD: 0.5 x 2.0 x 0.3cm

Day 12

12 days after starting treatment with RENASYS EDGE tNPWT, 20% granulating and 80% epithelialized tissue observed
LWD: 0.3 x 1.0 x 0.3cm

Day 18

Wound achieved closure with 100% epithelial tissue observed
LWD: 0.0 x 0.0 x 0.0cm

Treatment of an open surgical wound (dehiscence) following knee arthroplasty

Leticia Vallejo, President and Professor, Wound Care Plus Research and Education Center, San Juan, Puerto Rico

Wound healed with use of RENASYS® EDGE tNPWT

Patient

A 71-year-old patient with multiple comorbidities including diabetes mellitus type 2 and high blood pressure presented with dehiscence to a surgical wound following knee arthroplasty to the right leg. Treatment was delivered at the clinic.

Treatment

- Continuous mode therapy was used for the first 4 days before switching to variable intermittent mode therapy on RENASYS EDGE tNPWT

Conclusions

RENASYS EDGE System was utilized in the treatment of dehiscence of a surgical wound, wound healed in line with pre-specified treatment goals 32 days after treatment initiation.

Day 0

Prior to initiating treatment with RENASYS EDGE tNPWT, 95% necrotic and 5% granulating tissue observed
LWD: 7.0 x 1.0 x 0.4cm

Day 14

2 weeks after starting treatment with RENASYS EDGE tNPWT, 45% necrotic, 10% granulating and 45% epithelialized tissue observed
LWD: 6.0 x 0.5 x 0.3cm

Day 25

~3.5 weeks after starting treatment with RENASYS EDGE tNPWT, 10% granulating and 90% epithelialized tissue observed
LWD: 5.8 x 0.3 x 0.2cm

Day 32

Wound achieved closure with 100% epithelial tissue observed
LWD: 0.0 x 0.0 x 0.0cm

Treatment of a wound in a diabetic patient following infection

Leticia Vallejo, President and Professor, Wound Care Plus Research and Education Center, San Juan, Puerto Rico

Wound healed with use of RENASYS® EDGE tNPWT

Patient

A 44-year-old patient with multiple comorbidities including diabetes mellitus type 2, arterial insufficiency, high blood pressure, plus renal and hepatic failure presented with a wound to the anterior left foot. Treatment was delivered at the clinic.

Treatment

- Continuous mode therapy was used for the first 5 days before switching to variable intermittent mode therapy on RENASYS EDGE tNPWT
- Wound had previous infection and surgical intervention

Conclusions

RENASYS EDGE System was utilized in the treatment of dehiscence of a surgical wound, wound healed in line with pre-specified treatment goals 54 days after treatment initiation.

Day 0

Prior to initiating treatment with RENASYS EDGE tNPWT, 10% necrotic and 80% granulating tissue observed and tendon exposed
LWD: 5.0 x 4.0 x 2.0cm

Day 8

8 days after starting treatment with RENASYS EDGE tNPWT, 5% necrotic, 80% granulating and 10% epithelialized tissue observed and tendon exposed
LWD: 4.5 x 3.2 x 1.2cm

Day 28

4 weeks after starting treatment with RENASYS EDGE tNPWT, 80% granulation and 20% epithelialized tissue observed and no tendon exposed
LWD: 3.0 x 2.2 x 0.8cm

Day 54

~8 weeks after initiating treatment with RENASYS EDGE tNPWT, wound achieved closure with 100% epithelial tissue observed
LWD: 0.0 x 0.0 x 0.0cm

Treatment of a wound following abscess and acute infection on the chest wall

Leticia Vallejo, President and Professor, Wound Care Plus Research and Education Center, San Juan, Puerto Rico

Wound healed with use of RENASYS® EDGE tNPWT

Patient

A 55-year-old patient with a previous history of multiple comorbidities including diabetes mellitus type 2 and high blood pressure presented with a wound to the chest following an abscess and acute infection. Treatment was delivered at the clinic.

Treatment

- Continuous mode therapy was used for the first 4 days before switching to variable intermittent mode therapy on RENASYS EDGE tNPWT

Conclusions

RENASYS EDGE System was utilized in the treatment of wound following an abscess and infection, the wound healed in line with pre-specified treatment goals 19 days after treatment initiation.

Day 0

Prior to initiating treatment with RENASYS EDGE tNPWT, 100% granulating tissue observed
LWD: 2.0 x 1.5 x 1.0cm

Day 6

6 days after starting treatment with RENASYS EDGE tNPWT, 50% granulating and 50% epithelialized tissue observed
LWD: 0.8 x 0.5 x 0.2cm

Day 12

~5.5 weeks after starting treatment with RENASYS EDGE tNPWT, 5% granulating and 95% epithelialized tissue observed
LWD: 0.5 x 0.5 x 0.2cm

Day 19

Wound achieved closure with 100% epithelial tissue observed
LWD: 0.0 x 0.0 x 0.0cm

Treatment of a wound to the plantar foot

Leticia Vallejo, President and Professor, Wound Care Plus Research and Education Center, San Juan, Puerto Rico

Wound healed with use of RENASYS® EDGE tNPWT

Patient

A 45-year-old patient with multiple comorbidities including diabetes mellitus type 1, neuropathy and renal failure presented with a wound to the plantar right foot. Treatment was delivered at the clinic.

Treatment

- Continuous mode therapy on RENASYS EDGE tNPWT was utilized

Conclusions

RENASYS EDGE System was utilized in the treatment of wound to the plantar foot, the wound healed in line with pre-specified treatment goals 24 days after treatment initiation.

Day 0

Prior to initiating treatment with RENASYS EDGE tNPWT, 100% necrotic tissue observed
LWD: 1.5 x 1.5 x 1.0cm

Day 7

7 days after starting treatment with RENASYS EDGE tNPWT, 20% necrotic, 70% granulating and 10% epithelialized tissue observed
LWD: 1.0 x 1.0 x 0.5cm

Day 17

~2.5 weeks after starting treatment with RENASYS EDGE tNPWT, 10% granulating and 90% epithelialized tissue observed
LWD: 0.3 x 0.3 x 0.3cm

Day 24

Wound achieved closure with 100% epithelial tissue observed
LWD: 0.0 x 0.0 x 0.0cm

Treatment of a trauma wound following motor vehicle accident

Leticia Vallejo, President and Professor, Wound Care Plus Research and Education Center, San Juan, Puerto Rico

Wound healed with use of RENASYS® EDGE tNPWT

Patient

A 46-year-old patient with multiple comorbidities including diabetes mellitus and venous insufficiency presented with a trauma wound to the anterior aspect of right leg following a motor vehicle accident. Treatment was delivered at the clinic.

Treatment

- Continuous mode therapy was used for the first 13 days before switching to variable intermittent mode therapy on RENASYS EDGE tNPWT

Conclusions

RENASYS EDGE System was utilized in the treatment of a traumatic wound, the wound healed in line with pre-specified treatment goals 27 days after treatment initiation.

Day 0

Prior to initiating treatment with RENASYS EDGE tNPWT, 50% necrotic and 50% granulating tissue observed with tunneling present at the 12 and 6 o'clock position ranging from 2.5–3cm
LWD: 6.0 x 2.5 x 1.5cm

Day 9

9 days after starting treatment with RENASYS EDGE tNPWT, 60% granulating and 50% epithelialized tissue observed, tunneling reduced to 1–1.5cm
LWD: 4.0 x 1.0 x 0.3cm

Day 20

~3 weeks after starting treatment with RENASYS EDGE tNPWT, 10% granulation and 90% epithelialized tissue observed, tunneling resolved
LWD: 3.5 x 0.5 x 0.2cm

Day 27

~4 weeks after initiating treatment with RENASYS EDGE tNPWT, wound achieved closure with 100% epithelial tissue observed
LWD: 0.0 x 0.0 x 0.0cm

Treatment of a trauma wound to the thigh

Leticia Vallejo, President and Professor, Wound Care Plus Research and Education Center, San Juan, Puerto Rico

Wound healed with use of RENASYS® EDGE tNPWT

Patient

A 68-year-old patient with multiple comorbidities including diabetes mellitus type 2 and high blood pressure presented with a trauma wound to the right thigh. Treatment was delivered at the clinic.

Treatment

- Continuous mode therapy was used for the first 8 days before switching to variable intermittent mode therapy on RENASYS EDGE tNPWT

Conclusions

RENASYS EDGE System was utilized in the treatment of a traumatic wound to the right thigh, the wound healed in line with pre-specified treatment goals 16 days after treatment initiation.

Day 0

Prior to initiating treatment with RENASYS EDGE tNPWT, 95% necrotic and 5% granulating tissue observed
LWD: 1.0 x 5.0 x 0.3cm

Day 8

8 days after starting treatment with RENASYS EDGE tNPWT, 70% granulating and 30% epithelialized tissue observed
LWD: 0.5 x 3.0 x 0.3cm

Day 12

~2 weeks after starting treatment with RENASYS EDGE tNPWT, 30% granulating and 70% epithelialized tissue observed
LWD: 0.3 x 2.0 x 0.2cm

Day 16

Wound achieved closure with 100% epithelial tissue observed
LWD: 0.0 x 0.0 x 0.0cm

Treatment of a wound to the foot

Leticia Vallejo, President and Professor, Wound Care Plus Research and Education Center, San Juan, Puerto Rico

Wound healed with use of RENASYS® EDGE tNPWT

Patient

A 56-year-old patient with multiple comorbidities including diabetes mellitus type 2 and high blood pressure presented with a trauma wound with arterial insufficiency to the anterior left foot. Treatment was delivered at the clinic.

Treatment

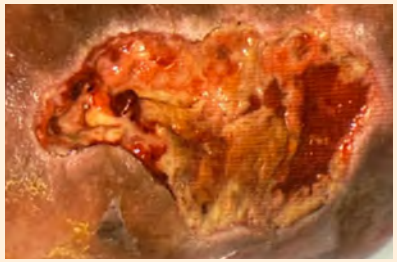
- Continuous mode therapy was used for the first 7 days before switching to variable intermittent mode therapy on RENASYS EDGE tNPWT

Conclusions

RENASYS EDGE System utilized in the treatment of trauma wound to the right foot, wound healed in line with pre-specified treatment goals 60 days after treatment initiation.

Day 0

Prior to initiating treatment with RENASYS EDGE tNPWT, 60% necrotic and 40% granulating tissue observed
LWD: 9.0 x 5.5 x 0.5cm



Day 26

26 days after starting treatment with RENASYS EDGE tNPWT, 80% granulating and 20% epithelialized tissue observed
LWD: 6.5 x 3.5 x 0.3cm

Day 39

~5.5 weeks after starting treatment with RENASYS EDGE tNPWT, 40% granulating and 60% epithelialized tissue observed
LWD: 3.8 x 2.0 x 0.3cm

Day 60

Wound achieved closure with 100% epithelial tissue observed
LWD: 0.0 x 0.0 x 0.0cm

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