

SilverStream

Medical



SURE | SWIFT | SAFE

***SUCCESS STORIES
FIRST TIME RIGHT***

Post Surgery SSI Edition



SilverStream

A SUPERIOR WOUND MANAGEMENT SOLUTION

The Power of Synergy



SilverStream[®] is intended for management of wounds such as:

- **Stage I-IV Pressure Ulcers**
- **Stasis Ulcers**
- **Post-Surgical Wounds**
- **Diabetic Foot Ulcers**
- **First And Second-Degree Burns**
- **Cuts, Abrasions and Minor Skin Irritations**

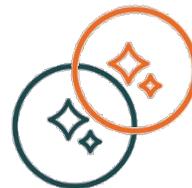
Silverstream[®] is a sterile buffered solution with pleasant odor.

Silverstream[®] is a clear solution, protected from microbial contamination by a low concentration ionic silver.

Each mL contains an antimicrobial ionic silver in the form of silver nitrate 0.01% (w/v).

THE POWER OF SYNERGY

INGREDIENT	ACTION	DESCRIPTION
Ag NO3	Preservative & Anti-microbial agent	Ionic silver kills on contact and inhibits the growth of bacteria, yeast, and fungi
Menthol	Penetration enhancer, Growth promoter, Pain reliever, Odor fighter	Enhances ionic silver antimicrobial activities & fights wound odor. Promotes granulation tissue growth by vasodilatation
Tween 20	Surfactant and Detergent	Enhances solution penetration into the biofilm Acts as wound cleansing detergent
Glycerol	A hypertonic aqueous solution that prevents macerations Soothing agent	Aids mechanical removal of exudates and microorganisms Creates Hydrogel function by absorbing water molecules
Tris Buffer	Buffered neutral pH	Biocompatible to physiological pH



Abdominal wall

NECROTIZING SOFT TISSUE INFECTION AND MULTIPLE BOWEL PERFORATIONS AFTER LIPOSUCTION PROCEDURE

By Cernica Chausha Weitman and Miklosh Balla

Place: Hadassah Medical Center, Jerusalem, Israel

Study Initiated on: 8/2022

Presented at EWMA, May 2023, Milan, Italy

Age of Patient: 43 yrs

Sex: Female

Age of Wound: 5 days after abdominal wall and bilateral thighs liposuction

Type of Wound:

Necrotizing Soft Tissue Infection and multiple bowel perforations after Liposuction Procedure.

Small intestine perforations

Septic shock + acute renal failure Admission to ICU
(mechanical ventilation and vasopressor support)



**BEFORE
SILVERSTREAM**



NECROTIZING SOFT TISSUE INFECTION AND MULTIPLE BOWEL PERFORATIONS

SilverStream Treatment :

No. of 250 ml
Silver Stream
Bottles Used: **21**

~250 ml of SilverStream was used per day, 3 weeks as a wound bed preparation for skin graft.

Infection reduction was observed with **good growth of granulation tissues covering area even before skin grafting.**

13 skin graft surgeries performed successfully during the treatment.

**BEFORE SILVERSTREAM
WEEK 0**



**AFTER SILVERSTREAM
BEFORE SKIN GRAFT**



**HEALING PROCESS
AFTER SKIN GRAFT**



Discharge after 5 month
of hospitalization:
3 month in ICU
2 month in General
Surgery unit

Pilonidal

SILVERSTREAM AND NEGATIVE PRESSURE VACUUM: RESECTION OF PILONIDAL DISEASE

By: Ido Mizrahi, MD, Noemie Nalbandian, RN MPH

Place: Hadassah Hebrew University Medical Center, Israel

Aim

To describe our results with a novel approach **using SilverStream Solution and SilverStream Solution & Negative Pressure Vacuum system for secondary intent wound healing after pilonidal surgery**

Methods

We hereby describe two cases of complicated pilonidal surgery.

- **Patient #1** had a large pilonidal sinus projecting to his right lower buttock. **After complete excision of his disease he was treated with Negative Pressure Vacuum and SilverStream.** His wound was completely closed 8 weeks after surgery.
- **Patient #2** was treated with **SilverStream** alone with complete wound closure 7 weeks after surgery.

No complication was recorded. Both patients reported minimal pain after surgery

Introduction

Pilonidal disease presents with a wide range of symptoms and multiple treatment options exist.

Resection of the disease with primary closure might result with wound infection, delayed wound healing, and recurrence. Hence, surgical resection with secondary intent wound healing is often performed.

Silverstream Solution and Negative Pressure Vacuum system offers rapid wound healing while avoiding wound complications.

SILVERSTREAM AND NEGATIVE PRESSURE VACUUM: RESECTION OF PILONIDAL DISEASE

Patient # 1				
Week	0	2	4	8
Length	11	10	7	0
Width	4	3.5	2	0
Depth	2	1.5	1	0

Patient #1 had a large pilonidal sinus projecting to his right lower buttock. **After complete excision of his disease he was treated with Negative Pressure Vacuum and SilverStream.** His wound was completely closed 8 weeks after surgery.



Week 0

Week 4

Week 8

Patient # 2				
Week	0	2	4	7
Length	9	7	5.5	0
Width	4	3	2.5	0
Depth	3.5	2.5	1.5	0

Patient #2 after complicated pilonidal surgery was treated with **SilverStream** alone with complete wound closure 7 weeks after surgery.



Conclusions:

SilverStream Solution or SilverStream Solution with Negative Pressure Vacuum offers rapid secondary wound healing after Pilonidal Disease Surgery.

Cosmetic results are excellent with no recurrence.

Post Surgery SSI

POST-SURGERY SSI: COMPLICATION AFTER ARTHRODESIS SURGERY

By Dr. Barash Yaakov

Country: Israel

Study Initiated on: 11/2022

Age of Patient: 67 yrs

Sex: Male

Type of Wound: post Arthrodesis 1st metatarsal phalanx rt foot. DS: HALLUX RIGIDUS

Age of Wound: 4 days post-surgery

Wound Condition before SilverStream:

The patient visited the clinic four days post-discharge following Arthrodesis 1st metatarsal phalanx right foot, specifically for HALLUX RIGIDUS surgery.

According to the patient, signs of inflammation around the suture and adjacent area became apparent on the third day after the surgery. Upon in-person examination, clear evidence of inflammation and symptoms of infection was observed.

Previous treatment used: Homecare

Treated with – alcohol

No signs of healing

BEFORE SILVERSTREAM WEEK 0



POST-SURGERY SSI: COMPLICATION AFTER ARTHRODESIS SURGERY

SilverStream Treatment :

SilverStream only, 5-7 ml SilverStream Solution per change, 2 x changes per day. Without the use of antibiotics. 2 weeks after SilverStream treatment the wound completely closed.

HOME CARE

No. of 250 ml SilverStream Bottles Used: < 1

The patient self-administered SilverStream treatment at home following instructions from the doctor and IFU, including photographing the wound for remote evaluation. A final in-person examination by the doctor concluded the process.

BEFORE SILVERSTREAM WEEK 0



AFTER SILVERSTREAM – WEEK 2



Doctor Speaks:



This topical antiseptic appears highly effective, particularly for homecare use. Immediate pain reduction was noted after the initial application, with no reported adverse events or reinfection, leading to complete wound healing.

Wound Characteristics	Week 0	Week 2
Wound Size	8 cm ²	Closed
Signs of Infection	Yes	No
Pain	Yes	No

POST-SURGERY SSI: COMPLICATION AFTER KNEE ARTHROPLASTY

Country: Israel

Study Initiated on: 07/2022

Age of Patient: 67 yrs

Sex: Male

Type of Wound: post-surgical: Knee Arthroplasty rt foot

Age of Wound: 4 weeks post-surgery

Wound Condition before SilverStream:

Post-surgical infection: The patient underwent total knee replacement on the right foot. Non-healing and infection persisted for 4 weeks, with a CRP level of 181 (normal range <5). No improvement in infection or healing was observed. Repeat knee replacement surgery was scheduled, but before the procedure, SilverStream was introduced for the first time.

Previous treatment used: Homecare

Treated with Saline, Betadine and other topicals

Oral Antibiotics

No signs of healing

BEFORE SILVERSTREAM WEEK 0



POST-SURGERY SSI: COMPLICATION AFTER KNEE ARTHROPLASTY

SilverStream Treatment :

SilverStream only, 5-7 ml SilverStream Solution per change, 2 x changes per day.
Pain reduction after 1-st treatment, No Re-Infection. CRP is back to normal. All the oral antibiotics were discontinued after SilverStream treatment. Complete Recovery after 20 days

HOME CARE

No. of 250 ml SilverStream Bottles Used: **1**

The patient self-administered SilverStream treatment at home based on doctor's instructions and IFU, including photographing the wound for remote evaluation. Intermittent and a final in-person examinations by the doctor concluded the process.

BEFORE SILVERSTREAM WEEK 0



AFTER SILVERSTREAM – WEEK 2



AFTER SILVERSTREAM – WEEK 3



Doctor Speaks:



I find SilverStream solution to be highly effective for post-surgical site infection (SSI) treatment, especially in the context of home care. It has proven to be excellent for home use. In this specific case, it obviated the need for a repeat surgery.

Wound Characteristics	Week 0	Week 3
Wound Size	4 cm ²	Closed
Signs of Infection	Yes	No
Pain	Yes	No
Excessive exudate	Yes	No

POST-SURGERY SSI: COMPLICATION AFTER KNEE ARTHROPLASTY

Country: Israel

Study Initiated on: 01/2023

Age of Patient: 62 yrs

Sex: Female

Type of Wound: post-surgical: Knee Arthroplasty left foot

Age of Wound: 3 weeks post-surgery

Wound Condition before SilverStream:

The patient underwent left foot knee replacement surgery. Subsequently, a non-healing wound persisted for three weeks post-surgery.

Previous treatment used: Homecare

The wound was initially treated with iodine and other silver dressings.

There were no discernible signs of wound healing during the specified duration

BEFORE SILVERSTREAM WEEK 0



POST-SURGERY SSI: COMPLICATION AFTER KNEE ARTHROPLASTY

SilverStream Treatment :

SilverStream only, 10 ml SilverStream Solution per change, 2 x changes per day.
 Pain reduction after 1-st treatment, No Re-Infection, No Adverse Event.
 Complete Recovery after 3 week.

HOME CARE

No. of 250 ml SilverStream Bottles Used: **1.5**

The patient self-administered SilverStream treatment at home based on doctor's instructions and IFU, including photographing the wound for remote evaluation. Intermittent and a final in-person examinations by the doctor concluded the process.

Doctor Speaks:



I have consistently observed the remarkable efficacy of SilverStream solution in the treatment of post-surgical site infections (SSI). Its application has demonstrated notable success, particularly in cases following surgery. I find it to be a valuable asset in our arsenal for managing SSI, and its effectiveness in mitigating infection-associated complications post-surgery is truly commendable.

BEFORE SILVERSTREAM WEEK 0 **AFTER SILVERSTREAM – WEEK 1** **AFTER SILVERSTREAM – WEEK 3**



Wound Characteristics	Week 0	Week 3
Wound Size	8 cm ²	Closed
Signs of Infection	Yes	No
Pain	Yes	No
Excessive exudate	Yes	No

POST-SURGERY SSI: THERAPY FOR TREATMENT OF IMPLANT ASSOCIATED MDR BACTERIAL INFECTION

By Dr. Chouhan V

Place: Department of Orthopaedics, Consultant Orthopaedic Surgeon, Bombay Hospital, Indore. India

Age of Patient: 40 yrs

Sex: Male

Type of Wound: Post-acetabular surgery developed surgical site infection

Wound Condition before SilverStream:

A 40-year-old male treated for bilateral acetabular fracture sustained after fall from height due to an episode of seizure. After acetabular surgery, he **developed surgical site infection** unresponsive to wound wash and intravenous antibiotics.

Figure 1

Pre-operative X-Ray showing bilateral quadrilateral plate fracture



Figure 3

Post-operative X-Ray showing bilateral fixation.

Figure 2

Pre-operative CT scan showing bilateral quadrilateral plate fracture.



A 40-year-old male presented with a history of seizures leading to a fall from a height of 10 feet, resulting in injuries to both hips and the left shoulder.

Diagnosis and Treatment Initiation:

Diagnosed with cerebral venous thrombosis and commenced on heparin.

Fracture Diagnosis:

X-rays and CT scans revealed bilateral acetabular fracture and a three-part left proximal humerus fracture.

Surgical Intervention:

Operated for bilateral acetabular fracture using the modified Stoppa's approach.

Fixed with a buttress plate in the true pelvis on both sides.

Postoperative Complications:

Postoperative day 3: Fever and discharge from the suture site.

Pus culture revealed Klebsiella and anaerobes sensitive to cefoperazone sulbactam, clindamycin, and amikacin.

Previous treatment used:

Infection Management Attempts:

Initial antibiotics treatment and wound wash.

Resumed discharge after 3 days, culture showed resistance to cefoperazone sulbactam.

Chloremphenical initiated, reducing pus discharge but not stopping it. Meropenem started based on sensitivity tests, providing temporary relief.

POST-SURGERY SSI: Therapy for Treatment of Implant Associated MDR Bacterial Infection

SilverStream Treatment :

QiVAS* Therapy Initiation:

About 2 weeks post-surgery, Qurion (under the brand SilverStream in certain countries) solution irrigation with Vacuum Assisted Suction (QiVAS)* therapy initiated.

Single stitches removed at both ends of the suture line, with infant feeding tubes inserted for irrigation and vacuum assisted suction.

Therapy Progress:

Daily Qurion irrigation conducted in the morning and evening, with QiVAS therapy for one hour. After two days of QiVAS therapy, the suture site became dry.

Continued Therapy and Antibiotics:

QiVAS therapy continued for 2 weeks alongside antibiotic meropenem. Blood counts and CRP returned to normal range after 2 weeks of QiVAS therapy.

Patient Discharge and Follow-up:

Patient discharged with no evidence of infection. Follow-up at 3 months and 6 months revealed no signs of infection

Figure 4

Clinical photograph showing QiVAS Therapy.



Figure 5

Clinical photograph showing QiVAS Therapy.



* Note: QiVAS, proposed by the author of this publication, refers to Qurion's irrigation solution under the brand SilverStream in certain countries. QiVAS stands for Vacuum Assisted Suction and represents an innovative approach to agricultural irrigation

Orthopedic Osteomyelitis

Chronic Osteomyelitis Wound Care

By Dr. Charles Cabuquit, Ortho-Wound Care Surgeon

Place: HilomWound Care Center in Manila, Philippines

Study Initiated on: October 2023

Sex: Female

Type of Wound: Chronic Osteomyelitis In The Left Tibia

SilverStream Treatment :

Application: 3ml of Silver Stream Solution is applied twice daily using a dropper.

Dressing: Siverstream solution is used as a primary dressing with a semi-occlusive secondary dressing.

Wound Condition before SilverStream:

The patient presented with chronic osteomyelitis in the left tibia, following open reduction internal fixation for a previous tibia fracture, exhibiting a draining sinus on the medial aspect of the distal leg.



Chronic Osteomyelitis Wound Care

Baseline
Sep 21st, 2023



MEDIAL aspect of distal leg, with draining sinus

Chronic Osteomyelitis
L tibia ,s/p
open
reduction IM
nailing for
previously
open tibia
fracture
P> admission,
for IV
antibiotics



ANTERIOR aspect of distal leg

AFTER SILVERSTREAM –
Sep 27th, 2023



MEDIAL aspect of distal leg, noted with decrease in swelling and size of draining sinus

Day 6 of admission and IV antibiotics,
noted improvement in labs and clinical
status
Discharged on oral antibiotics

Wound care at home with SilverStream

AFTER SILVERSTREAM –
Oct 5th, 2023



MEDIAL aspect of distal leg, decreased in size of draining sinus and output

2 weeks on antibiotics
(1week IV,1 week oral)

SilverStream on Homecare

Chronic Osteomyelitis Wound Care

**BEFORE SILVERSTREAM –
21 September 2023**

SEPT 21, 2023



**AFTER SILVERSTREAM –
3rd week
14 October 2023**

3rd week using SilverStream, completed 2 weeks antibiotics



OCTOBER 14, 2023



ANTERIOR and MEDIAL aspects of the left leg, showing decreased size of sinus

Chronic Osteomyelitis Wound Care



Baseline
Sep 21st, 2023

**AFTER SILVERSTREAM –
3.5 Weeks
21 October 2023**

Completed 3.5 weeks of wound care with SilverStream solution, pre-op picture before planned debridement and removal of implant

OCTOBER 21, 2023



MEDIAL aspect of the left leg (close-up picture), showing decreased size of sinus

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