Pressure Ulcers

Age and Sex: 81, F

- Wound site: Sacral region
- **Duration of treatment:** 25 days
- Cause of wound: Hospitalization after CVA.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan gel were used for
- autolytic debridement and tissue regeneration, respectively.







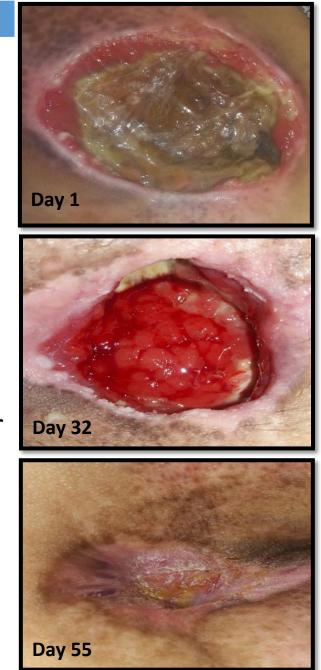
- **Year:** 2018
- Age and Sex: 58, M
- Wound site: Sacral region
- **Duration of treatment:** 75 days
- Cause of wound: Immobilization after car accident.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan powder were used for
- autolytic debridement and tissue regeneration, respectively.







- **Year:** 2017
- Age and Sex: 27, F
- Wound site: Sacral region
- **Duration of treatment:** 55 days
- Cause of wound: Hospitalization after renal failure.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan powder were used for
- autolytic debridement and tissue regeneration, respectively.



Age and Sex: 73, M

- Wound site: Right leg
- **Duration of treatment:** 45 days
- Cause of wound: Brace therapy pressure.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan (gel and powder)
- were used for autolytic debridement and tissue regeneration,



- **Year:** 2016
- Age and Sex: 35, M
- Wound site: Groin region
- **Duration of treatment:** 75 days
- Cause of wound: Immobilization after car accident.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan powder were used for
- autolytic debridement and tissue regeneration, respectively.



Age and Sex: 70, M

- Wound site: Right trochanter
- **Duration of treatment:** 30 days
- Cause of wound: Hospitalization after CVA.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan (gel and powder)
- were used for autolytic debridement and tissue regeneration,







- **Year:** 2014
- Age and Sex: 92, M
- Wound site: Sacral region
- Duration of treatment: 80 days
- Cause of wound: Hospitalization after CVA.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan (gel and powder) were
- used for autolytic debridement and tissue regeneration,
- respectively.



Age and Sex: 77, F

- Wound site: Sacral region
- **Duration of treatment:** 75 days
- Cause of wound: Hospitalization after CVA.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan (gel and powder) were
- used for autolytic debridement and tissue regeneration,







Age and Sex: 76, M

- Wound site: Medial side of right knee
- Duration of treatment: 21 days
- Cause of wound: Hospitalization after CVA.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan (gel and powder)
- were used for autolytic debridement and tissue regeneration,





- **Year:** 2005
- Age and Sex: 71, M
- Wound site: Sacral region
- Duration of treatment: 30 days
- Cause of wound: Hospitalization after CVA.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Chitosan gel and powder were used for tissue regeneration.





- **Year:** 2005
- Age and Sex: 47, F
- Wound site: Sacral region
- Duration of treatment: 90 days
- Cause of wound: Immobilization after car accident.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan (gel and powder) were
- used for autolytic debridement and tissue regeneration,
- respectively.







Age and Sex: 68, M

- Wound site: Sacral region
- **Duration of treatment:** 40 days
- **Cause of wound:** Hospitalization after an open heart surgery.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Chitosan foam and gel were applied to treat the
- ulcer while keeping an eye on suspected DTI. Treatment was

successful with no DTI developing.



- Age and Sex: 47, F
- Wound site: Right leg
- Duration of treatment: 65 days
- Cause of wound: Immobilized after knee arthroplasty.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was used for autolytic debridement
- along with sharp debridement. After removal of necrotic tissue,
- the ulcer was diagnosed as stage-III pressure ulcer. Treatment
- was continued with chitosan powder and gel.





Day 65

Age and Sex: 28, M

- Wound site: Heel of right foot
- **Duration of treatment:** 65 days
- Cause of wound: Immobilization due to spinal cord injury.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was used for autolytic debridement
- along with sharp debridement. After removal of necrotic tissue, the
- ulcer was diagnosed as stage-II pressure ulcer. Treatment was
- continued with chitosan foam and gel.







- **Year:** 2017
- Age and Sex: 86, F
- Wound site: Sacral region
- Duration of treatment: 65 days
- Cause of wound: Hospitalization after CVA.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was used for autolytic debridement
- along with sharp debridement. After removal of necrotic tissue,
- the ulcer was diagnosed as stage-III pressure ulcer. Treatment was continued with calcium alginate.



- **Year:** 2016
- Age and Sex: 81, M
- Wound site: Sacral region
- Duration of treatment: 65 days
- Cause of wound: Hospitalization after CVA.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was used for autolytic debridement
- along with sharp debridement. After removal of necrotic tissue,
- the ulcer was diagnosed as stage-II pressure ulcer. Treatment was
- continued with calcium alginate.





Day 21

Age and Sex: 28, M

- Wound site: Sacral region
- **Duration of treatment:** 60 days
- Cause of wound: Immobilization due to spinal cord injury.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was used for autolytic debridement
- along with sharp debridement. After removal of necrotic tissue,
- the ulcer was diagnosed as stage-III pressure ulcer. Treatment was
- continued with sodium alginate, chitosan (powder, and gel) for
- autolytic debridement of residual slough and tissue regeneration,

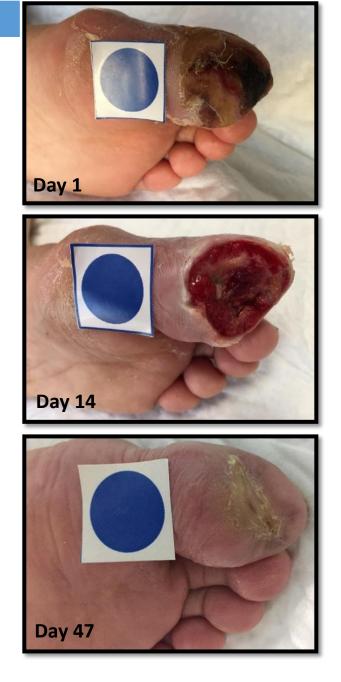






Diabetic Ulcers

- **Year:** 2018
- Age and Sex: 54, F
- Wound site: Left big toe
- **Duration of treatment:** 47 days
- Cause of wound: Ischemia.
- **Treatment:** Nano colloidal silver solution was used for wound disinfection. Sodium alginate and chitosan gel were used for autolytic debridement and tissue regeneration, respectively.



- **Year:** 2018
- Age and Sex: 58, M
- Wound site: Left toes
- Duration of treatment: 66 days
- **Cause of wound:** Necrotic wound after surgical amputation.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was used for autolytic debridement. Day 26
- After removal of necrotic tissue, treatment was continued with
- chitosan gel and calcium alginate.







Age and Sex: 33, M

- Wound site: Right sole
- **Duration of treatment:** 88 days
- Cause of wound: Surgical debridement.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan powder were used for
- autolytic debridement and tissue regeneration respectively.
- After removal of necrotic tissue, treatment was continued with calcium alginate.







- **Year:** 2018
- Age and Sex: 57, F
- Wound site: Right big toe
- **Duration of treatment:** 28 days
- Cause of wound: Ischemia.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was used for autolytic debridement. Day 4
- After removal of necrotic tissue, treatment was continued with
- chitosan gel.







- **Year:** 2018
- Age and Sex: 50, M
- Wound site: Right foot
- **Duration of treatment:** 40 days
- Cause of wound: Neuropathic ulcer, malum perforans pedis.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. After sharp debridement of wound edges, sodium
- alginate and chitosan (powder and gel) were used for autolytic
- debridement and tissue regeneration, respectively.







- **Year:** 2018
- Age and Sex: 60, M
- Wound site: Right foot
- **Duration of treatment:** 43 days
- Cause of wound: Neuropathic ulcer.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. After sharp debridement of indurated edges, sodium
- alginate was used for autolytic debridement. Calcium alginate and
- chitosan gel were used for tissue regeneration.







Age and Sex: 68, M

- Wound site: Right foot
- Duration of treatment: 80 days
- **Cause of wound:** Surgical amputation of fifth toe.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan (powder and gel)
- were used for autolytic debridement and tissue regeneration,







Age and Sex: 70, M

Wound site: Left foot

Duration of treatment: 75 days

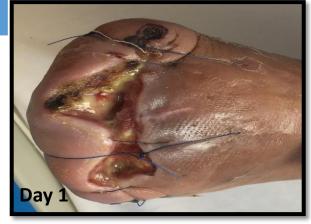
Cause of wound: Wound infection after amputation.

Treatment: Nano colloidal silver solution was used for wound

disinfection. After autolytic debridement with sodium alginate,

calcium alginate and chitosan gel were used for tissue

regeneration.







- **Year:** 2017
- Age and Sex: 60, F
- Wound site: Right heel
- **Duration of treatment:** 59 days
- Cause of wound: Neuropathic ulcer.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. After sharp removal of blister, treatment was
- continued with chitosan (powder and gel) and calcium alginate.



Age and Sex: 68, M

Wound site: Right foot

Duration of treatment: 69 days

Cause of wound: Wound infection after amputation of fourth and fifth toes.

- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was used for autolytic debridement.
- Afterwards calcium alginate and chitosan gel were used for tissue regeneration.







Age and Sex: 50, F

- Wound site: Right foot
- **Duration of treatment:** 40 days
- Cause of wound: Ischemia.
- **Treatment:** Nano colloidal silver solution was used for wound disinfection. After removal of necrotic and slough tissue with
- sodium alginate, treatment was continued with chitosan gel.





Age and Sex: 54, F

- Wound site: Left foot
- **Duration of treatment:** 84 days
- **Cause of wound:** Neuroishcemic ulcer after amputation of third and fourth toes.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was used for autolytic debridement.
- After removal of necrotic tissue, treatment was continued with
- chitosan (powder and gel) and calcium alginate.







- **Year:** 2017
- Age and Sex: 63, M
- Wound site: Left foot
- **Duration of treatment:** 48 days
- **Cause of wound:** Neuropathic ulcer, malum perforans pedis.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan gel were used for
- autolytic debridement and tissue regeneration, respectively.







- **Year:** 2016
- Age and Sex: 26, F
- Wound site: Right foot
- **Duration of treatment:** 15 days
- Cause of wound: Auto-amputation of fifth toe.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan were used for
- autolytic debridement and tissue regeneration, respectively.







Age and Sex: 51, M

Wound site: Left foot

Duration of treatment: 60 days

Cause of wound: Wound dehiscence after amputation of fifth toe.

Treatment: Nano colloidal silver solution was used for wound disinfection. Sodium alginate and chitosan (powder and gel) were used for autolytic debridement and tissue regeneration, respectively.



Day 60

Age and Sex: 54, F

Wound site: Right big toe

Duration of treatment: 50 days

Cause of wound: 18-years history of diabetes with neuroischemic ulcer.

Treatment: Nano colloidal silver solution was used for wound

disinfection. After sharp debridement of wound edges, sodium

alginate was used for softening the fibrotic tissue and chitosan

powder was applied for tissue regeneration.







- **Year:** 2006
- Age and Sex: 65, M
- Wound site: Right foot
- **Duration of treatment:** 58 days
- Cause of wound: Ischemia.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was used for autolytic debridement
- along with sharp debridement. After removal of necrotic tissue,
- treatment was continued with chitosan powder and gel.







Burn Wounds

- Age and Sex: 7 months, M
- Wound site: Face
- Duration of treatment: 28 days
- **Cause of wound:** Deep second-degree burn wound caused by hot coal.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan gel were used for
- autolytic debridement and tissue regeneration, respectively.







- **Year:** 2015
- Age and Sex: 56, M
- Wound site: Left Foot
- **Duration of treatment:** 60 days
- **Cause of wound:** Third-degree burn wound caused by gasoline.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was applied for autolytic removal
- of yellow slough tissue and calcium alginate and chitosan gel
- were used for tissue regeneration.







- **Year:** 2015
- Age and Sex: 56, M
- Wound site: Right Leg
- Duration of treatment: 60 days
- **Cause of wound:** Third-degree burn wound caused by gasoline.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was used for autolytic removal of
- yellow slough tissue and calcium alginate and chitosan gel were applied for tissue regeneration.







- **Year:** 2014
- Age and Sex: 5, F
- Wound site: Face
- Duration of treatment: 30 days
- **Cause of wound:** Deep second-degree burn wound caused by a hot object.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan gel were used for
- autolytic debridement and tissue regeneration, respectively.





- **Year:** 2014
- Age and Sex: 49, M
- Wound site: Right foot
- Duration of treatment: 34 days
- **Cause of wound:** Deep second-degree burn wound caused by boiling water.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was used for autolytic removal of
- yellow slough tissue and calcium alginate was applied for tissue regeneration.





- **Year:** 2014
- Age and Sex: 1, F
- Wound site: Left shoulder
- **Duration of treatment:** 35 days
- **Cause of wound:** Deep second-degree burn wound caused by boiling milk.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan gel were applied for
- autolytic debridement and tissue regeneration, respectively.







- **Year:** 2006
- Age and Sex: 26, F
- Wound site: Abdominal region
- Duration of treatment: 28 days
- **Cause of wound:** Deep second-degree burn wound caused by boiling water.
- **Treatment:** Nano colloidal silver solution was used for wound disinfection. Sodium alginate and chitosan were used for
- autolytic debridement and tissue regeneration, respectively.







- **Year:** 2006
- Age and Sex: 53, F
- Wound site: Left big toe
- **Duration of treatment:** 17 days
- **Cause of wound:** Deep second-degree burn wound caused by a hot object.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Chitosan gel was used for tissue regeneration.





Age and Sex: 41, M

- Wound site: Dorsum of right hand
- **Duration of treatment:** 7 days
- **Cause of wound:** Deep second-degree burn wound caused by boiling water.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Chitosan gel was used for tissue regeneration.





- **Year:** 2006
- Age and Sex: 22, M
- Wound site: Right thigh
- **Duration of treatment:** 15 days
- **Cause of wound:** Deep second-degree burn wound caused by a hot object.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan gel were used for
- autolytic debridement and tissue regeneration, respectively.



- **Year:** 2005
- Age and Sex: 23, M
- Wound site: Face
- **Duration of treatment:** 6 days
- **Cause of wound:** Superficial second-degree burn wound caused by flame.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Chitosan gel was used for tissue regeneration.







Vascular Ulcers

- **Year:** 2018
- Age and Sex: 85, M
- Wound site: Left leg
- Duration of treatment: 50 days
- Cause of wound: Venous ulcer.
- **Treatment:** Nano colloidal silver solution was used for wound disinfection. Sodium alginate and chitosan gel were applied for autolytic removal of yellow slough tissue and tissue regeneration, respectively.







- **Year:** 2016
- Age and Sex: 57, M
- Wound site: Right leg
- **Duration of treatment:** 60 days
- **Cause of wound:** Vascular and lymphatic insufficiency.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Chitosan gel was applied for tissue regeneration.





- **Year:** 2015
- Age and Sex: 46, M
- Wound site: Right hand
- **Duration of treatment:** 51 days
- **Cause of wound:** Patient is a victim of chemical warfare suffering from vascular insufficiency.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan were used for
- autolytic debridement and tissue regeneration, respectively.







- **Year:** 2015
- Age and Sex: 68, F
- Wound site: Right leg
- Duration of treatment: 60 days
- Cause of wound: Vascular and lymphatic insufficiency.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was applied for autolytic removal
- of yellow slough tissue. Calcium alginate and chitosan gel were
- applied for tissue regeneration.







- **Year:** 2015
- Age and Sex: 46, M
- Wound site: Left leg
- **Duration of treatment:** 65 days
- Cause of wound: Patient is a victim of chemical warfare
- suffering from vascular insufficiency.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan were used for
- autolytic debridement and tissue regeneration, respectively.







Traumatic Wounds

- **Year:** 2018
- Age and Sex: 4, F
- Wound site: Face
- **Duration of treatment:** 30 days
- Cause of wound: Car accident.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan gel were used for
- autolytic debridement and tissue regeneration, respectively.







- **Year:** 2018
- Age and Sex: 59, M
- Wound site: Left foot
- **Duration of treatment:** 62 days
- Cause of wound: Traumatic puncture caused by pin, developed
- to a chronic ulcer in a diabetic patient.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan (gel and foam) were
- used for autolytic debridement and tissue regeneration, respectively.







Age and Sex: 16, F

- Wound site: Right heel
- **Duration of treatment:** 40 days
- **Cause of wound:** Avulsion caused by trauma, developed to a chronic ulcer.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was used for autolytic debridement
- of yellow slough tissue, then treatment was continued with chitosan gel.







- **Year:** 2005
- Age and Sex: 28, M
- Wound site: Left foot
- **Duration of treatment:** 67 days
- Cause of wound: Avulsion.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan (gel and powder)
- were used for autolytic debridement and tissue regeneration,
- respectively.







Surgical Ulcers

Age and Sex: 58, F

- Wound site: Abdominal region
- **Duration of treatment:** 43 days
- Cause of wound: Surgical incision dehiscence.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan (gel and powder)
- were used for autolytic debridement and tissue regeneration,

respectively.







- **Year:** 2017
- Age and Sex: 26, M
- Wound site: Head
- Duration of treatment: 15 days
- **Cause of wound:** Unsuccessful primary suturing of a traumatic ulcer, developed to necrotic tissue.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan gel were used for
- autolytic debridement and tissue regeneration, respectively.







- **Year:** 2016
- Age and Sex: 2.5, F
- Wound site: Right foot
- Duration of treatment: 60 days
- **Cause of wound:** Removal of rhabdomyosarcoma tumor.
- **Treatment:** Nano colloidal silver solution was used for wound disinfection. Chitosan gel and powder were applied for tissue regeneration.







- **Year:** 2015
- Age and Sex: 45, M
- Wound site: Abdominal region
- Duration of treatment: 65 days
- Cause of wound: Surgical incision dehiscence.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan (gel and powder)
- were used for autolytic debridement and tissue regeneration,

respectively.







Age and Sex: 68, M

- Wound site: Right trochanter
- **Duration of treatment:** 35 days
- Cause of wound: Surgical incision dehiscence.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate and chitosan (gel and powder)
- were used for autolytic debridement and tissue regeneration,

respectively.







Age and Sex: 75, F

- Wound site: Left ankle
- **Duration of treatment:** 55 days
- **Cause of wound:** Unsuccessful grafting of an avulsion by car accident.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sodium alginate was used for autolytic debridement
- of necrotic tissue and slough tissue, then treatment was
- continued with chitosan gel.







- **Year:** 2005
- Age and Sex: 19, F
- Wound site: Right leg
- **Duration of treatment:** 53 days
- **Cause of wound:** Unsuccessful wound closure after knee surgery.
- Treatment: Nano colloidal silver solution was used for wound
- disinfection. Sharp debridement along with sodium alginate were
- used for autolytic debridement, then treatment was continued
- with chitosan (gel and powder).





