

Emad Pharmaceutical Co. is the third manufacturer of Silver Nano-Crystalline Dressing in the world. Using silver ion as an antimicrobial agent, is entered to the drug list more than 100 years. Until recent decades, using the silver metal because of weakness of technology was inconceivable, till by nanotechnology using silver metal a new antimicrobial agent was flourished. Currently two American and British corporation by two different nanotechnology method succeeded to make long acting silver dressing. Emad pharmaceutical company as third producer in the world could produce Nanocrystalline Silver Dressing.





This case is a patient with Necrotizing Fasciitis caused by advanced diabetes, with WBC 28000, have lost even his bones due to the severity of the infection and thus is highly prone to septic shock.

In the first step, wound was cleansed of all the infections, lost tissues and bones.



Starting treatment process, Agicoat Silver Nanocrystalline dressing immediately began to forming flesh. Also, it prevents spreading of infection.

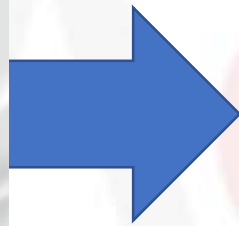
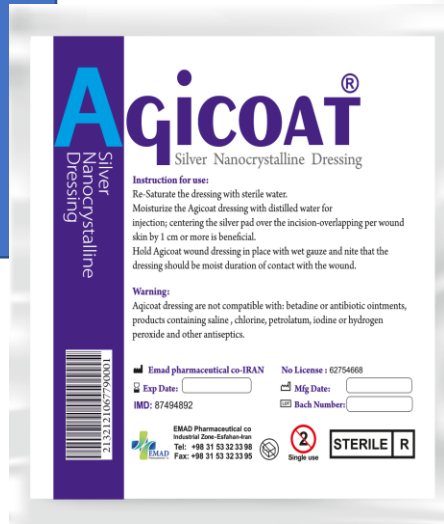


Nanotechnology intelligence and the use of woven fabric in this dressing texture, make all extra residual pieces, (e.g. bones or sloughy tissue) visible and during the treatment process to be removed; thus, increasing blood circulation in the body and granulation tissue production.





Eventually, after the 40 days, the quadriceps muscles created by cohesive flesh formation, the patient was saved from the risk of amputation.



- Agicoat is a silver impregnated dressing facilitating the delivery of silver to the burn wound surface. It contains nanocrystalline silver which when moistened with sterile water releases silver ions onto the wound surface. The invitro antimicrobial action of silver has been demonstrated to destroy within 30 minutes, both Gram positive and negative bacteria as well as Vancomycin resistant enterococci (VRE) and Methicillin resistant S.aureus.
- The action is accomplished by the silver ions binding to tissue proteins causing a structural change in the bacterial cell membranes. The silver then binds and denatures the bacterial DNA and RNA, thus inhibiting replication.
- The action of Agicoat is fast in destroying pathogens such as Escherica coli, S.aureus and Methicillin resistant S.aureus and Pseudomonas aeruginosa.
- The reduction of burn wound scar by using Agicoat can be attributed to its ability to reduce inflammation. Research revealed that Agicoat has an anti-inflammatory effect through metalloproteinases, this has a role in the degradation of extra-cellular proteins in wound sites, allowing optimal granulation.

