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REVIEW / PRACA POGLĄDOWA

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CHRONIC TRAUMATIC WOUND. A CASE REPORT.

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S u m m a r y

Among many types of chronic wounds there is a place for traumatic wounds. The circumstances in which they appeared influence their nature. Traumatic wounds are often very deep and a fight to save the wounded parts of the body such as the upper limb requires medical and nursing actions. Proceedings in accordance with the applicable recommendation of scientific societies guarantee a success in the form of restoration of continuity of the skin. A case of 23 years old- man, whose accident at the workplace caused a deep loss for the dorsum of left hand, is presented in the study.
Interdisciplinary and local actions based on the latest recommendations in line with the foundation's strategy resulted in a T.I.M.E strategy have been applied

S t r e s z c z e n i e

Wśród wielu rodzajów ran przewlekłych szczególne miejsce zajmują rany urazowe. Na ich zróżnicowany charakter bardzo często mają wpływ okoliczności, w jakich doszło do jej powstania. Niejednokrotnie rany urazowe są bardzo rozległe, głębokie i „walka" o uratowanie okaleczonej części ciała np. kończyny górnej, wymaga podejmowania wielokierunkowych i zespołowych działań lekarsko-pielęgniarskich. Postępowanie zgodne z obowiązującymi rekomendacjami towarzystw naukowych gwarantuje sukces w postaci odtworzenia ciągłości skóry.

W pracy zaprezentowano opis przypadku 23-letniego mężczyzny, u którego w wyniku wypadku w miejscu pracy powstał głęboki ubytek na dłoni kończyny górnej lewej. Interdyscyplinarne, zespołowe działania i postępowanie miejscowe oparte na najnowszych rekomendacjach, zgodne z założeniami strategii T.I.M.E, wpłynęło na uzyskanie postawionego wspólnie celu w postaci przygotowania łożyska rany do przeszczepu skórnego.

Key words: traumatic wounds, T.I.M.E strategy.

Słowa kluczowe: rana pourazowa, strategia T.I.M.E,

Chronic wounds have been present in humanity since the old days. The first reports confirming their presence come from Egyptian papyri. [1] Chronic ulcers appear in Lazarus as mentioned in the New Testament. [2]. We have already pointed the attention to the loss before the malfunction of the external environment.

For centuries, the wound was wrapped in accordance with the prevailing trends on the basis of experience, for instance: injuries such as resin was supplied with conifers, the leaves of cabbage, myrrh incense, elephant skin or used mud wraps. Materials used to supply tissue tended to develop slowly, ranging from nature by creating an ideal environment for healing wounds[1,3]. With the development of change; look on the wound underwent chronic and its needs in terms of conduct of the local and overall. Still they represent serious social and economic problems (traumatic wounds).

We can count on the collaboration of many specialists in the field of medicine and includes clinical nursing, microbial action and education. It is an essential element of therapeutic diagnostics and implementing adequate causal treatment and then local action. [4,5,6,7,8]. Local affixing the chronic wound is to be drown according to the T.IM.E Strategy that will increase the chances of recovery. It includes not only cleaning and elimination of bad factors, but also enhancing the potential and possibilities of natural healing process – to stimulate the formation of the skin. [8,9]

A CASE REPORT:

23 year – old patient was admitted to the Department of orthopaedic and traumatology with a serious injury to the left upper limb. The accident occurred during work on the machine, separating the grain constructed of rubber rollers where the patient put his hand. The patient was transported by helicopter within one hour of the incident to the Emergency Department in University Hospital in Bydgoszcz.

The description of ulcers and the surrounding skin:

The wound is located on the dorsal side of the left upper limb palm.

Metacarpophalangeal joint is closer and completely unveiled, along with a pond; we also discovered a dorsal surface of the proximal phalanx of the finger; there were no digitorum tendons. X –ray test result – three suspected fractured metacarpal. Uneven bone contour of the finger proximal phalanx 2-traumatic changes.

The treatment included: rinsing by Natrium Chloratum (0.9%) and securing with sterile dressings. 4 hours after taking, the patient's surgery was performed. In 5 days after surgery around the wound there was a significant inflammatory reaction and was observed a lot of purulent secretions.

Visible necrotic tissue was present. The skin graft was poorly supplied with blood vessels. The culture was grown 3 types of bacteria: Gramm negative rods, Enterococcus foecalis, Bacillus spp, we used antibiotics: Piperacillinae with tazobactam 3 x 4.5 gr.

We used daily antiseptic wound and dry compresses and elevation stiffening limbs. In 90 % of the graft has healed from falling.

In 13 days after surgery the patient was reported to the nurse's consultation clinics treating chronic wounds in order to take care of the wound and implementation of modern proceedings and preparing the wound bed for transplant applications.

The description of ulcers and the surrounding skin:

The wound with an area 53.25 cm2 a large segment of the dorsal side of your hand and three fingers (II,III,IV) to the height of the proximal interphalangeal joints. From the proximal edge of the wound sites to skinning and from the distal edge of the wound undermined developed for outdoors without epitalizaic evidence. Skin –swollen and red.

Diagnosis:

-full – thickness skin loss
-exposed bone fragments
-local wound infection

Aim:

-cleaning of the wound
-the elimination of infection
-speeding up the healing process
- preparing the wound bed for transplant applications.

Implemented disposal:

For the first 5 days once a day Octenilin gel was applied, which has biocidal activity. The skin around the wound was washed with broad – spectrum antiseptic action.

After 25 days of treatment, the patient was discharged home and referred to the Clinic treating chronic wounds.[figure4].

The healing process proceeded in different ways. Various dressings and preparations were given to the patient, including: hyaluronic acid dressings with silver ions, hydrocolloid dressings, garamycin sponge and polyurethane dressings.

Ulcer area measurement:

1. First measurement – 53.25 cm 2
2. Second measurement – 42.125 cm2
3. Third measurement – 36.75 cm2
4. Fourth measurement- 23.25 cm2

THE RESULTS ACHIEVED:

Within 7days of therapy satisfactorily effect was achieved, demonstrated in the progress of healing wounds and preparing the wound for skin graft application.

Discussion:

Traumatic wound may carry a different character. It may be shallow, deep, irritating to tendons or bones. Complicated and complex process of healing wounds requires different actions. Very good preparations have an impact on the process of healing.

A right choice of treatment of the wound is the most beneficial

for the patient and carries a small risk of complications. Very good result was obtained by authors who published their work in 2011. The profound loss of sponge implants were applied on the wound. After 6 weeks of therapy the effect was very good. According to many authors [15], hyaluronic acid belongs to the most important discoveries of the modern medicine. In a pilot study conducted in 2011, healing of chronic wounds by using hyaluronic acid and iodine was evaluated.
80% of patients experienced full healing within 21 weeks and at one /third of the responders – in 7 weeks.

CONCLUSIONS:

Within 7 weeks satisfactorily effect of debridement and reduction of the surface, preparation applications bearing the wounds of graft was achieved.

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Ryc. 1. *Zakażone owrzodzenie po nałożeniu przeszczepu*

Ryc.2. *Owrzodzenie w fazie oczyszczania*

Ryc.3. *Owrzodzenie po 7 dniach terapii*

Ryc. 4. Rana 25 dni po przeszczepie

Ryc.5. *Rana w różnych fazach oczyszczania, ziarninowania, naskórkowania*

Ryc.6. *Owrzodzenie przygotowane do aplikacjiprzeszczepu*

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